

Santa Clara



City of Santa Clara, California



**DATE:** October 2, 2008

**TO:** City Manager for Council Action

**FROM:** Director of Planning and Inspection

**SUBJECT:** Planning Commission Recommendation to Adopt the Resolution to Adopt the Mitigated Negative Declaration and Rezone from A (Agriculture) to B (Public), to Allow Amendment of the Existing Conditional Use Permit to Construct a 215 Space Parking Lot on an Undeveloped Parcel at 2800 Mission College Boulevard, Our Lady of Peace Church (APN 104-16-089) (PLN2008-06863)

### **EXECUTIVE SUMMARY:**

On September 24, 2008 the Planning Commission reviewed an application to rezone the vacant site at 2800 Mission College Boulevard from A (Agriculture) to B (Public Facility) and to allow amendment of the existing Use Permit to allow the construction of a parking lot. The proposal includes the development of an approximately 215 space parking lot with associated landscaping and lighting. The parking lot will be used for overflow parking for special events at the Church and visitors to the Shrine.

An application for a similar project was submitted to the City in 1997, but was withdrawn when burrowing owls were discovered on the site. A burrowing owl study has been conducted for this proposal, and no owls were found on the site or within the vicinity. A Mitigated Negative Declaration was prepared for the project, and Mitigation Measures related to Air Quality, Cultural Resources, Hydrology and Water Quality, and Burrowing Owls were incorporated as conditions of approval to the project.

A Notice of Public Hearing was mailed to property owners within 300 feet on October 2, 2008, and was posted at the project site on October 3, 2008.

The resolution, with the Property Description, Conditions of Approval and Plan Set, are attached, along with the September 24, 2008 Planning Commission Staff Report and Minutes Excerpt, the initial study and mitigated negative declaration and the mitigation monitoring and reporting program.

### **ADVANTAGES AND DISADVANTAGES OF ISSUE:**

The rezoning of the site and parking lot development will enable the use of the site for Church patrons. The rezone and development of the site will take away designated agricultural land within the City.

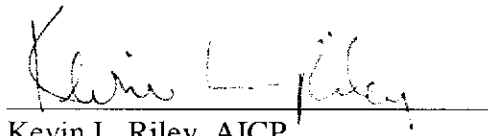
### **ECONOMIC/FISCAL IMPACT:**

There is no cost to the City other than administrative staff time and expense.

City Manager for Council Action  
2800 Mission College Blvd.  
October 14, 2008  
Page 2

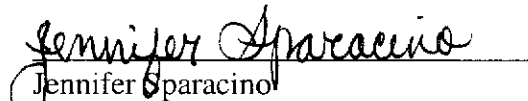
**RECOMMENDATION:**

That the Council adopt the resolution to adopt the mitigated negative declaration and rezone from A (Agriculture) to B (Public) to allow amendment of the existing conditional use permit to construct a 215 space parking lot on an undeveloped parcel at 2800 Mission College Boulevard, Our Lady of Peace Church (APN 104-16-089) (PLN2008-06863).



Kevin L. Riley, AICP  
Director of Planning and Inspections

APPROVED:

  
Jennifer Sparacino  
City Manager

*Documents Related to this Report:*

- 1) *Resolution with Property Description, Conditions of Approval and Plan Set attached*
- 2) *Planning Commission Staff Report from September 24, 2008 (without attachments), attached*
- 3) *Planning Commission Minutes Excerpt from September 24, 2008, attached*
- 4) *Initial Study and Mitigated Negative Declaration,*
- 5) *Mitigation Monitoring and Reporting Program,*

**RESOLUTION NO. \_\_\_\_**

**A RESOLUTION OF THE CITY COUNCIL OF THE CITY  
OF SANTA CLARA, CALIFORNIA, REZONING THE  
PARCEL LOCATED AT 2800 MISSION COLLEGE  
BOULEVARD, SANTA CLARA**

**PLN2008-06863 (Rezone)**

**BE IT RESOLVED BY THE CITY COUNCIL OF THE CITY OF SANTA CLARA,  
CALIFORNIA, AS FOLLOWS:**

**WHEREAS**, The Diocese of San Jose is the owner ("Owner") of 2800 Mission College Boulevard (APN 104-16-089) ("Property"); and

**WHEREAS**, the 1992 General Plan of the City of Santa Clara designates the property at 2800 Mission College Boulevard in the City of Santa Clara ("Project Site") as Institutional Use; and

**WHEREAS**, the Project Site is currently zoned as "A" (Agriculture); and

**WHEREAS**, in order to construct a parking lot on an existing vacant portion of the Property ("Project"), all as shown on the Development Plan, attached hereto and incorporated herein by reference as Exhibit A ("Development Plan"), the Project Site needs to be rezoned to "B" (Public Facility); and

**WHEREAS**, Owner applied for a Rezoning of the Property from A (Agricultural) to B (Public Facility); and

**WHEREAS**, Santa Clara City Code ("SCCC") Section 18.112.040 provides for the review and recommendation of the City's Planning Commission of all rezoning requests before action by the City Council; and

**WHEREAS**, following a noticed public hearing on September 24, 2008, for the Project approval, the Planning Commission recommended to the City Council of the City of Santa Clara that it rezone the Project Sites to "B" (Public Facility); and

**WHEREAS**, SCCC Section 18.112.030 requires that the City Council consider rezoning of a Property only after holding a public hearing; and

**WHEREAS**, SCCC Section 18.112.060 requires that notice of the public hearing be given by posting the property in at least three (3) conspicuous places at least ten (10) days prior to the hearing date; and

**WHEREAS**, SCCC Section 18.112.060 further requires that notice of the public hearing be given by mailing notices to property owners, as of the last assessor's roll, within three hundred (300) feet of the boundary of the Property; and

**WHEREAS**, notices describing the proposed rezoning were sent to neighboring property owners on October 2, 2008; and

**WHEREAS**, notices describing the proposed rezoning were posted at the Project Site on October 3, 2008; and

**WHEREAS**, the Project entitlements will include this Rezoning Resolution (collectively "Entitlements"); and

**WHEREAS**, the City Council finds that the identified Conditions of Approval, attached hereto and incorporated by reference as Exhibit B, have been incorporated and imposed on the Project; and

**WHEREAS**, the City Council has reviewed the requested rezoning of the Project Site and conducted a public hearing.

**NOW THEREFORE, BE IT FURTHER RESOLVED BY THE CITY COUNCIL OF THE CITY OF SANTA CLARA, CALIFORNIA, AS FOLLOWS:**

1. That the Project Site, consisting of one lot of approximately 5.78 acres, is hereby rezoned from A (Agriculture) to B (Public Facility).
2. Pursuant to SCCC Section 18.112.010, the City Council finds and determines that the public necessity or convenience of the general welfare requires the rezonings set forth above in order to conserve property values, in that the rezoning from Agriculture to Public use unifies the church properties for assembly and church related activities; to protect or improve the existing character and stability of the area in question, in that the proposal improves the aesthetics and function of the existing undeveloped property with circulation, lighting and landscaping; and to promote the orderly and beneficial development of such area, in that the proposed rezoning allows a surface parking lot for convenient vehicle parking and safe pedestrian accessibility in proximity to church assembly and activities.
3. That, based on this Rezoning Resolution and the evidence in the City Staff Report and any oral or written testimony submitted at the hearing on this matter, the City Council hereby rezones the Project Site as set forth herein.
4. If any section, subsection, sentence, clause, phrase, or word of this resolution is for any reason held by a court of competent jurisdiction to be unconstitutional or invalid for any reason, such decision shall not affect the validity of the remaining portions of the resolution. The City Council of the City of Santa Clara hereby declares that it would have passed this resolution and each section, subsection, sentence, clause, phrase, and word thereof, irrespective of the fact that any one or more section(s), subsection(s), sentence(s), clause(s), phrase(s), or word(s) be declared invalid.

**I HEREBY CERTIFY THE FOREGOING TO BE A TRUE COPY OF A RESOLUTION  
PASSED AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF SANTA  
CLARA, CALIFORNIA, AT A REGULAR MEETING THEREOF HELD ON THE \_\_\_\_  
DAY OF OCTOBER, 2008, BY THE FOLLOWING VOTE:**

**AYES: COUNCILORS:**

**NOES: COUNCILORS:**

**ABSENT: COUNCILORS:**

**ABSTAINED: COUNCILORS:**

**ATTEST: \_\_\_\_\_**  
**ROD DIRIDON, JR.**  
**CITY CLERK**  
**CITY OF SANTA CLARA**

Attachments Incorporated by Reference:

1. Exhibit A: Development Plan
2. Exhibit B: Conditions of Approval

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C.1



DATE: 01-28-2008	PLAN: 00000001
DATE: 05-29-2008	UPDATED SITE PLAN AND GRADING AND DRAINAGE PLAN FOR ENVIRONMENTAL REVIEW
DATE: 08-21-2008	UPDATED SITE PLAN AND GRADING AND DRAINAGE PLAN
DATE: 08-21-2008	PCC SUBMITTAL

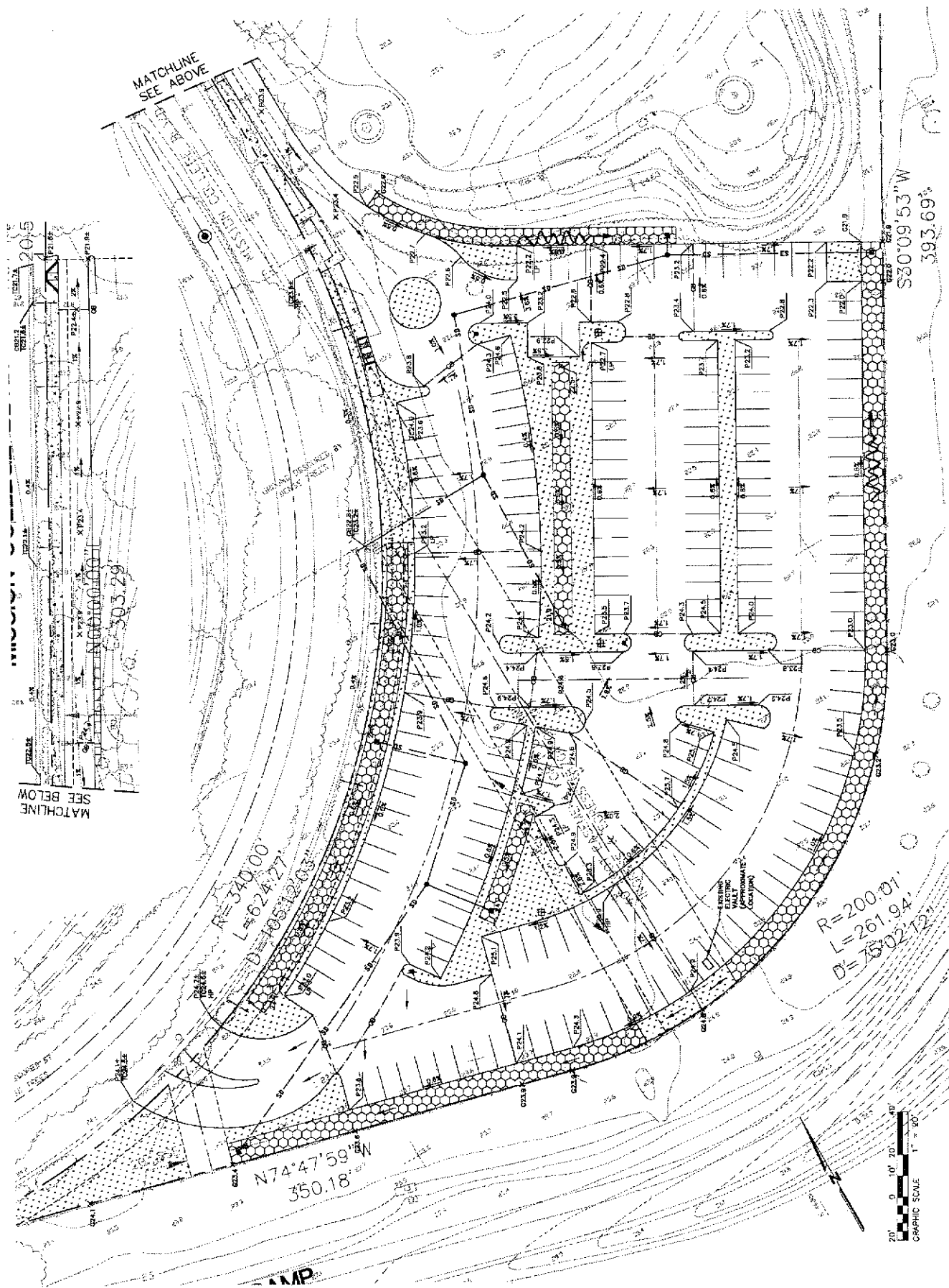
## Our Lady of Peace

2850 Mission College Blvd  
Santa Clara, CA 95054

## CONCEPTUAL GRADING AND DRAINAGE PLAN

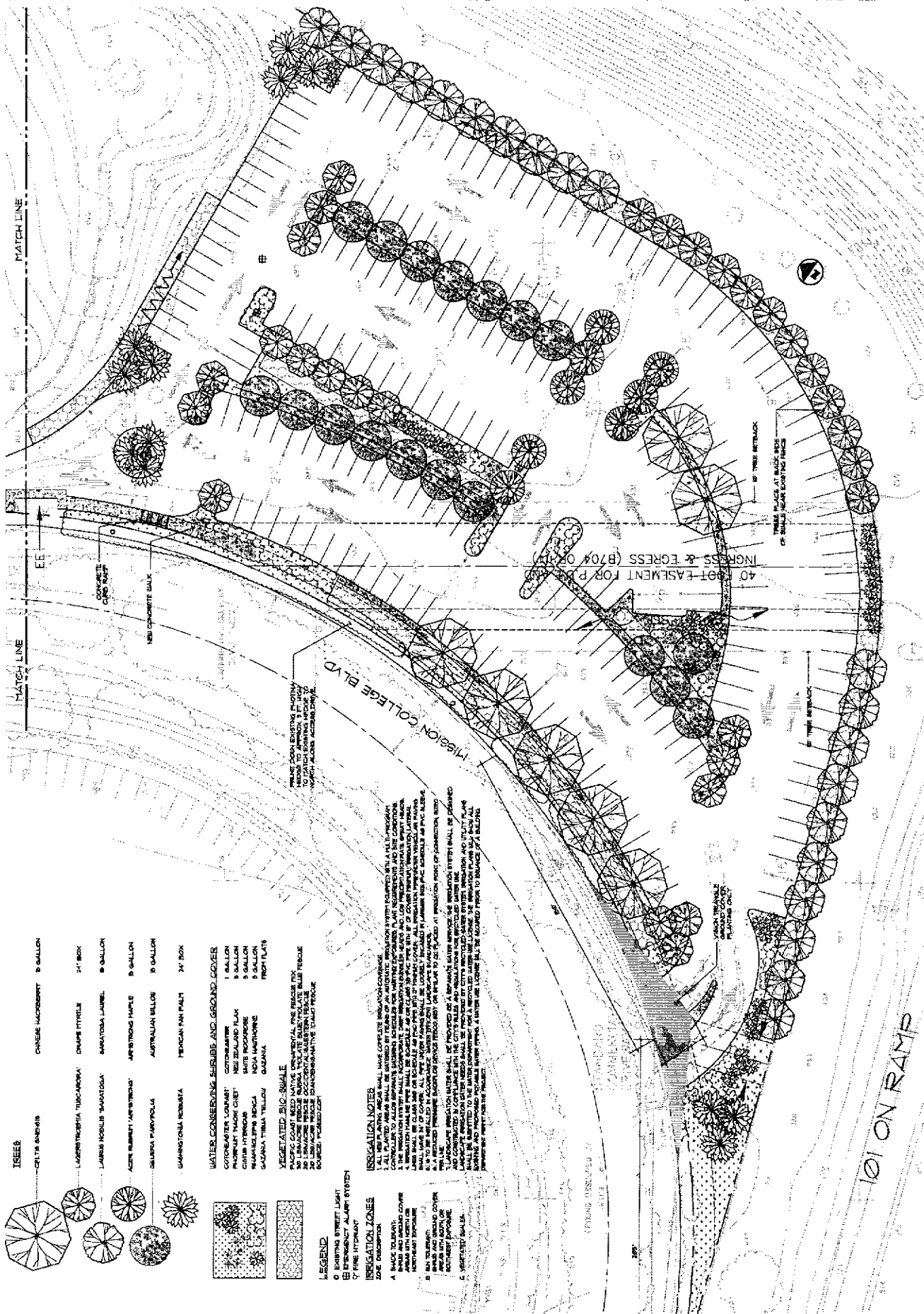
PROJECT 8-070309  
SCALE 1" = 20'

30









# Exhibit B

## Conditions of Approval

In addition to complying with all applicable codes, regulations, ordinances and resolutions, the following conditions of approval are recommended:

### **GENERAL**

1. If relocation of an existing public facility becomes necessary due to a conflict with the developer's new improvements, then the cost of said relocation shall be borne by the developer.

### **ENGINEERING**

2. Obtain site clearance through Engineering Department prior to issuance of building permit. Site clearance will require payment of applicable development fees. Other requirements may be identified for compliance during the site clearance process.
3. All work within the public right-of-way and/or public easement, which is to be performed by the Developer/Owner, the general contractor, and all subcontractors, it shall be included within a **Single Street Opening Permit** issued by the City Engineering Department. Issuance of the Street Opening Permit and payment of all appropriate fees shall be completed prior to commencement of work, and all work under the permit shall be completed prior to issuance of occupancy permit.
4. Construct driveways in the public right-of-way to City commercial type standards. Any proposed non-standard driveway will require approval of the City Engineer and the developer's execution of an agreement to maintain the driveway.
5. Visual obstructions over three feet in height will not be allowed within the driver's sight triangle near driveways and corners in order to allow an unobstructed view of oncoming traffic. Contact Traffic Engineering at (408) 615-3021 for further information.
6. Unused driveways in the public right-of-way shall be replaced with City standard curb, gutter, and sidewalk.
7. Damaged curb, gutter, and sidewalk within the public right-of-way along property's frontage shall be repaired or replaced (to the nearest score mark) in a manner acceptable to the City Engineer or his designee. The extents of said repair or replacement within the property frontage shall be at the discretion of the City Engineer or his designee.
8. Developer to provide a complete storm drain study for the 10-year and 100-year storm events. The grading plans shall include the overland release for the 100-year storm event and any localized flooding areas. System improvements, if needed, will be at developer's expense.

9. All trees, existing and proposed, must maintain minimum of ten (10) feet from any existing or proposed public utility facilities. Trees shall not be planted in public utility easements.
10. Payment of development fees (which was deferred by City Council on 6/14/83) is required at this time. The estimated fees, as of 2/22/2008, are \$108,215 (excluding electric fee).

#### **ELECTRIC**

11. Prior to submitting any project for Electric Department review, applicant shall provide a site plan showing all existing utilities, structures, easements and trees. Applicant shall also include a "Load Survey" form showing all current and proposed electric loads. A new customer with a load of 500KVA or greater or 100 residential units will have to fill out a "Service Investigation Form" and submit this form to the Electric Planning Department for review by the Electric Planning Engineer. Silicon Valley Power will do exact design of required substructures after plans are submitted for building permits.
12. The Developer shall provide and install electric facilities per Santa Clara City Code chapter 17.15.210.
13. Electric service shall be underground. See Electric Department Rules and Regulations for available services.
14. Installation of underground facilities shall be in accordance with City of Santa Clara Electric Department standard UG-1000, latest version, and Santa Clara City Code chapter 17.15.050.
15. Underground service entrance conduits and conductors shall be "privately" owned, maintained, and installed per City Building Inspection Division Codes. Electric meters and main disconnects shall be installed per Silicon Valley Power Standard MS-G7, Rev. 2.
16. The developer shall grant to the City, without cost, all easements and/or right of way necessary for serving the property of the developer and for the installation of utilities (Santa Clara City Code chapter 17.15.110).
17. All electric meters and services disconnects shall be grouped at one location, outside of the building or in a utility room accessible directly from the outside. A double hasp locking arrangement shall be provided on the main switchboard door(s). Utility room door(s) shall have a double hasp locking arrangement or a lock box shall be provided. Utility room door(s) shall not be alarmed.
18. All trees, existing and proposed, shall be a minimum of five (5) feet from any existing or proposed Electric Department facilities. Existing trees in conflict will have to be removed. Trees shall not be planted in PUE's or electric easements.
19. Any relocation of existing electric facilities shall be at Developer's expense.
20. Electric Load Increase fees may be applicable.

21. The developer shall provide the City, in accordance with current City standards and specifications, all trenching, backfill, resurfacing, landscaping, conduit, junction boxes, vaults, street light foundations, equipment pads and subsurface housings required for power distribution, street lighting, and signal communication systems, as required by the City in the development of frontage and on-site property. Upon completion of improvements satisfactory to the City, the City shall accept the work. Developer shall further install at his cost the service facilities, consisting of service wires, cables, conductors, and associated equipment necessary to connect a customer to the electrical supply system of and by the City. After completion of the facilities installed by developer, the City shall furnish and install all cable, switches, street lighting poles, luminaries, transformers, meters, and other equipment that it deems necessary for the betterment of the system (Santa Clara City Code chapter 17.15.210 (2)).
22. Electrical improvements (including underground electrical conduits on properties frontage) may be required if any private single improvement valued at \$50,000 or more or any series of private improvements made within a three-year period valued at \$50,000 or more in conjunction with a use, variance, or moving permit. Also may be required if any single private improvement valued at \$80,000 or more or any series of private improvements made within a three-year period valued at \$80,000 or more in conjunction with a building permit (Santa Clara City Code Title 17 Appendix A (Table III)).
23. Applicant is advised to contact SVP (CSC Electric Department) to obtain specific design and utility requirements that are required for building permit review/approval submittal. Please contact Leonard Buttitta at 408-261-5469 after development of site plan, to facilitate plan review.
24. Parking lot lights shall be located outside of existing electric easement and substructures.

#### **WATER**

25. It shall be the responsibility of the owner/developer to determine if there are any water wells on the property. Unless the continued use of such well or wells is specifically permitted under City Code, and such well or wells can be demonstrated to meet all applicable sanitary standards and absent of contamination, the well or wells shall be sealed in accordance with the Standards promulgated by Santa Clara Valley Water District. A copy of the Destruction Permit issued by District, indicating that the well or wells have been properly sealed, shall be submitted to City as evidence thereof.
26. Water and sewer service shall be independent, that is, the said property shall not be connected to lines from the adjacent properties unless approved by the City Building Official.
27. Landscape irrigation water shall be provided by a separate water service(s). Irrigation system shall be designed and constructed in compliance with City's Rules and Regulations for recycled water use.

28. Landscape irrigation water needs shall be provided by City's recycled water system. Developer must submit landscape irrigation plans with utility plans to Water Department for review and for City issued recycled water use license. The irrigation plans must show all existing and proposed potable water piping. Developer must secure recycled water use license before Building Department issues a building permit for the project.

29. All on-site fire hydrants shall be part of a private system.

30. Adjust water main valve box and sanitary sewer manhole to grade.

#### **FIRE**

31. Plans and fees shall be submitted to the Fire Department for installation of the three proposed fire hydrants shown.

#### **POLICE**

32. Provide a minimum illumination of one-foot candle in carport, parking areas and in all common pedestrian or landscaped areas of the development. The illumination should be deployed in fixtures that are both weather and vandal resistant.

33. A Knox Box or Coded Entry System is required for Police access to enclosed parking lots and gated communities.

34. The parking structure/site should be equipped with an emergency panic alarm system that reports to a central office. If more than one button is installed, they should be placed no more than 100 ft. apart.

35. The parking structure/site should be equipped with emergency telephones.

36. All entrances to parking areas (surface, structure, sub-terranean, etc.) should be posted with appropriate signage to discourage trespassing, unauthorized parking, etc. (See California Vehicle Code Section 22658(a) for guidance).

37. The 'Parking Structure & Parking Lot Security' recommendations provided to applicant should be considered, with applicable provisions implemented.

#### **STREET**

38. Contact for all C3 requirements is Rick Mauck, Director of Street and Automotive Services Department at (408) 615-2099.

#### **PLANNING AND INSPECTION**

39. Obtain required permits and inspections from the Building Official and comply with the conditions thereof.

40. Submit plans for final architectural review to the Planning Division and obtain architectural approval prior to issuance of building permits.

41. All outstanding fees shall be paid prior to City Council Hearing.

42. Incorporate Best Management Practices (BMP's) into construction plans and incorporate post construction water runoff measures into project plans in accordance with the City's Urban Runoff Pollution Prevention Program standards prior to the issuance of permits.

**43. MM-AIR-2.1:** The BAAQMD has prepared a list of feasible construction dust control measures that can reduce construction impacts to a less than significant level. The following construction practices will be implemented during construction on all sites within the project area:

- Water all active construction areas at least twice daily
- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.
- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.
- Sweep streets daily (preferably with water sweepers) all paved access roads, parking areas, and staging areas at construction sites.
- Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets.
- Hydroseed or apply non-toxic soil stabilizers to inactive construction areas.
- Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).
- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.

**44. CULTURAL RESOURCES:** As required by County ordinance, this project has incorporated the following guidelines. - Pursuant to Section 7050.5 of the Health and Safety Code, and Section 5097.94 of the Public Resources Code of the State of California in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the land owner shall re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

**45. MM HYDRO-1.1:** Prior to construction of the project, the City shall require the applicant to submit a Storm Water Pollution Prevention Plan (SWPPP) and a Notice of Intent (NOI) to the State of California Water Resource Quality Control Board to control the discharge of storm water pollutants including sediments associated with construction activities. Along with these documents, the applicant may also be required to prepare an Erosion Control Plan. The Erosion Control Plan may include Best Management Practices (BMPs) as specified in the California Storm Water Best Management Practice Handbook (such as silt fences/straw waddles around the perimeter of the site, regular street cleaning, and inlet protection) for

reducing impacts on the City's storm drainage system from construction activities. The SWPPP shall include control measures during the construction period for:

- Soil stabilization practices,
- Sediment control practices,
- Sediment tracking control practices,
- Wind erosion control practices, and
- Non-storm water management and waste management and disposal control practices.

**46. MM HYDRO-1.2:** Prior to issuance of a grading permit, the applicant shall be required to submit copies of the NOI and Erosion Control Plan (if required) to the Department of Public Works. The applicant shall also be required to maintain a copy of the most current SWPPP on-site and provide a copy to any City representative or inspector on demand.

**47. MM HYDRO-1.3:** The development shall comply with City of Santa Clara ordinances, including erosion- and dust-control during site preparation and grading, and maintaining adjacent streets free of dirt and mud during construction.

**48. MM BIO: Burrowing Owls**

- Pre-construction Surveys. Pre-construction surveys for burrowing owls should be conducted in potential habitat in conformance with CDFG protocols, no more than 30 days prior to the start of construction. If no Burrowing Owls are located during these surveys, no additional action would be warranted. However, if Burrowing Owls are located on or immediately adjacent to (i.e., within 250 ft of) the site the following mitigation measures will be implemented.
- Buffer Zones. If Burrowing Owls are present during the nonbreeding season (generally 1 September to 31 January), a 150-foot (ft) buffer zone should be maintained around the occupied burrow(s) if practicable. If such a buffer is not practicable, a reduced buffer is acceptable during the nonbreeding season as long as the burrow will not be directly impacted (in which case Measure 1c should be implemented). During the breeding season (generally 1 February to 31 August), a 250-ft buffer, within which no new activity will be permissible, will be maintained between project activities and occupied burrows. Owls present on site after 1 February will be assumed to be nesting on or adjacent to the site unless evidence indicates otherwise. This protected area will remain in effect until 31 August, or based upon monitoring evidence, until young owls are foraging independently or the nest is no longer active.
- Passive Relocation. If construction will directly impact occupied burrows, eviction of owls should occur outside the nesting season to prevent injury or mortality of individual owls. No burrowing owls will be evicted from burrows during the nesting season (1 February through 31 August) unless evidence indicates that nesting is not actively occurring (e.g., because the owls have not yet begun nesting early in the season, or because young have already fledged late in the season). Relocation of owls during the nonbreeding



season will be performed by a qualified biologist using one-way doors, which should be installed in all burrows within the impact area and left in place for at least two nights. These one-way doors will then be removed and the burrows backfilled immediately prior to the initiation of grading.



**Planning Commission Staff Report – September 24, 2008**

**Agenda Item # 9**

**File:** PLN2008-06863  
**Location:** 2800 Mission College Boulevard, a 5.78 acre parcel bounded by Our Lady of Peace Church to the north, Great America Parkway to the east and Mission College Boulevard to the south and west (APN 104-16-089)  
**Environmental Determination:** Mitigated Negative Declaration Prepared State Clearing House No. 2008082098  
**Applicant:** Our Lady of Peace Church  
**Owner:** The Dioses of San Jose  
**Request:** **Adoption of Mitigated Negative Declaration, Rezone** from A (Agriculture) to B (Public) and amend the existing **Conditional Use Permit** to construct a 215 space parking lot on an undeveloped parcel  
**Project Planner:** Julie Moloney, Associate Planner

**Staff Recommendation:** **Recommend City Council approval, subject to conditions**

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**PROJECT DESCRIPTION**

Our Lady of Peace Church and Shrine is requesting to rezone the vacant site adjacent to the Shrine from A (Agriculture) to B (Public Facilities), and amend the existing Conditional Use Permit to construct a 215 space parking lot. This parking lot will be used as overflow parking.

The church currently holds worship services on Sundays, limited services during the week, and associated Sunday school and day care services. On occasion, the church may host larger events, subject to a Special Permit (SCCC 18.60). The additional parking is to accommodate these events, as well as general public visitation to the Shrine.

**BACKGROUND**

In 1997, a similar application was made, in conjunction with additional development of the site. The parking lot improvement portion of the application was withdrawn due to the presence of burrowing owls on the site. A burrowing owl survey was conducted with this application and found that there is no evidence of owls on the site. This survey is included as an appendix to the Mitigated Negative Declaration.

**PRIOR ACTIONS**

08/27/97: Prior Approval of Gymnasium and Multi-purpose buildings  
01/29/08: Current Application received  
09/08/08: Application deemed complete by Project Clearance Committee

**CURRENT USE / ZONING / GENERAL PLAN**

**Current Use:** Vacant  
**Current Zoning:** A (Agriculture). In order to use the parcel for a parking lot, as an extension of the church, the site must be rezoned.

**General Plan Designation:**

The General Plan designates this parcels for Institutional uses. This proposal is seen to be consistent with the General Plan designation.

## **NEARBY PROPERTIES Land Use and Zoning**

North: Our Lady of Peace Shrine/Public Facility  
East: Office and Tourist Commercial uses  
South: Highway 101  
West: Mercado Shopping Center and Mission College/Commercial Park

## **ENVIRONMENTAL DETERMINATION**

Pursuant to the guidelines established by the California Environmental Quality Act, a Mitigated Negative Declaration was prepared for the project.

**Public Input:** *The notice of availability of the environmental document and the notice of public hearing for this item was posted within 300 feet of the site and mailed to property owners within 300 feet. The following comments have been received as of the preparation of this report:*

- At the time of this staff report, there has been no public input, either in support or opposition to this request.

**Considerations:** *The following general factors may be considered in evaluating this request. Some of these factors may represent evidence or facts that may directly support or refute the findings necessary to support this request:*

- The vacant parcel is currently zoned Agricultural, but has not been used for agricultural purposes since the area has been developed.
- The adjacent parcel containing the Church and Shrine are zoned B (Public Facilities).
- The vacant parcel stands alone from the church parcel. No lot merger is proposed at this time.
- The proposed parking lot would serve the Church needs for overflow parking.
- Developing the site with a parking lot will establish infrastructure on the vacant parcel.
- A Mitigated Negative Declaration was prepared for the project. All potentially significant impacts were minimized to less than significant with Mitigations incorporated. The Mitigation Monitoring and Reporting Program is attached to this report.

**Alternatives to the Proposal:** *The following alternative measures or possible changes to the project may achieve the project goals to some degree and/or result in a lesser impact than the project proposal, and may be but are not necessarily recommended by staff.*

- None proposed or recommended

## **FINDINGS REQUIRED TO SUPPORT THE REQUEST**

*Findings provide a means to link the available evidence with the decision to approve or deny the application. If this request is favorably considered, the preponderance of evidence should support the following or similar findings to approve the **Rezoning and Conditional Use Permit Amendment** request. The following evidence and facts provide a basis for the recommendation/action on this request:*

Section 18.112.010 of the Zoning Ordinance states that any district established by this title, or the boundaries thereof, may be changed, amended or altered, or any provision thereof may be changed, altered or amended; and any property within the city may be zoned, rezoned, reclassified or established whenever the public necessity or convenience of the general welfare required the same by following the procedure set forth in this chapter.

The proposed zone change will:

- Conserve property values in that the site in its current state does not contribute to the property values of the Church or surrounding properties and development of the site will clean it up and provide a useful parking area. The project site is located in an urbanized

area served by municipal services and is presently vacant.;

- Protect or improve the existing character and stability of the project area in that the site is currently vacant and covered in dirt and weeds and the development of the parking lot will clean up the site and provide landscaping. The proposed development is compatible in use with the institutional, commercial and industrial uses surrounding the site.;
- Promote the orderly and beneficial development of such area in that the site will be developed with infrastructure including water for irrigation purposes and electricity for lighting. The physical development of the project site would improve the parcel and provide infrastructure to the site.

Section 18.110.040 of the Zoning Ordinance states that *in order to grant any use permit, the findings of the Planning Commission shall be:*

*a) That the establishment or operation of the use or building applied for, under the circumstances of the particular case, are essential or desirable to the public convenience or welfare;*

The development of a parking lot are essential and desirable to the public convenience and welfare in that the site is currently vacant and not utilized. A parking lot will clean up the site, provide convenient parking for patrons, and provide landscaping and additional lighting to the area.

*b) That said use will not be detrimental to any of the following:*

*1) The health, safety, peace, morals, comfort, and general welfare of persons residing or working in the neighborhood of such proposed use;*

The development of a parking lot will not be detrimental to the health, safety, peace, morals, comfort and general welfare in that the site is surrounded by commercial, industrial and institutional uses and the intended use of the parking lot will not generate noise, odors, or other activities that may impair the health, safety, peace, morals, comfort and general welfare of the neighborhood.

*2) Property or improvements in the neighborhood of such proposed use; or*

The existing site is currently not being used for any purpose other than occasional overflow parking. The development of a paved, lit and landscaped parking lot will improve the surrounding property values and aesthetics of the area.

*3) The general welfare of the City;*

The development of a parking lot will not be detrimental to the general welfare of the City in that intended use of the site is to park vehicles for overflow parking for uses that are currently undertaken by the Church.

*c) That said use will not impair the integrity and character of the zoning district; and*

The site is proposed to be rezoned from A (Agriculture) to B (Public Facilities) which is consistent with the adjacent parcel. The parking lot will be used for overflow parking for events at the Church and Shrine.

*d) That said use is in keeping with the purposes and intent of this title.*

A parking lot is an allowed use in the B (Public Facilities) zoning district.

#### **STAFF RECOMMENDATION – September 24, 2008**

Recommend that the Planning Commission make the necessary findings, based upon the evidence articulated above and as may be provided through the public hearing, to **recommend that the City Council approve** this request, subject to conditions.

## REZONING

9. File: **PLN2008-06863**  
Location: 2800 Mission College Boulevard, a 5.78 acre parcel bounded by Our Lady of Peace Church to the north, Great America Parkway to the east and Mission College Boulevard to the south and west  
(APN 104-16-089)  
Applicant/Owner: Our Lady of Peace Church  
Request: **Rezone** from A (Agriculture) to B (Public) to construct a 215 space parking lot on an undeveloped parcel  
Project Planner: Julie Moloney, Associate Planner

### Summary of Discussion

Following Ms. Moloney's presentation on this project, Commission Champeny expressed concern that the parcels fall within an area identified as a burrowing owl habitat. He questioned the Initial Study report that indicated the impact on the habitat would be "less than significant." Architect for the project, Elizabeth Gibbons, said the study had been done during the owls' prime habitat period in April. Chairperson Fitch asked whether the Department of Fish and Game had been notified about the proposed project. Ms. Moloney said they had but had not responded. Ms. Gibbons added that a biological study indicated no burrowing owls had been observed in the area for 3 or 4 years. Mr. Champeny asked if there is a relocation plan for any owls that might be found during excavation, and Ms. Gibbons said there is standard Fish and Game protocol that would be followed, and a biologist would determine what the best relocation plan would be at that time.

Joe Mastroieni, representing Our Lady of Peace Church, spoke and indicated the parking lot currently has 300 spaces, which are insufficient to accommodate the church's special events, which draw up to around 1,000 people.

Following discussion, the public hearing was closed. Commissioners asked about the timing of the proposed construction, and Commissioner Champeny said that if the construction would not take place until next spring, he would like another burrowing owls study to be done in the spring.

### Commission Action

Commissioner Barcells moved to approve the request in that the Commission made the necessary findings, based upon the evidence presented in the Staff Report with regard to the conditions of Section 18.110.040 of the Zoning Ordinance, and the public hearing, to recommend that the City Council approve the request, subject to conditions and that Staff make another follow-up contact with the Department of Fish and Game to notify them about this project, and, if construction does not occur before April 30, 2008, that another study be done to check for burrowing owls. Commissioner Champeny seconded the motion, and it was approved unanimously.

Exhibit 4

**Initial Study**

# **Our Lady of Peace Church and Shrine Parking Lot Site Paving Project**

**File Numbers: PLN2008-06863**



**City of Santa Clara**

**September 2008**

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APPENDIX B	Geotechnical Investigation, Cleary Consultants



## **SECTION 1      INTRODUCTION AND PURPOSE**

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This Initial Study of environmental impacts is being prepared to conform to the requirements of the California Environmental Quality Act (CEQA), the CEQA Guidelines (California Code of Regulations 15000 et. seq.), and the regulations and policies of the City of Santa Clara. This Initial Study evaluates the potential environmental impacts which might reasonably be anticipated to result from the rezoning of a 5.78-acre site, and paving of a 2.28-acre portion of the site for a proposed overflow parking lot adjacent to the Our Lady of Peace Church and Shrine, and identifies mitigation measures included in the project.

The City of Santa Clara is the Lead Agency under CEQA and has prepared this Initial Study to address the impacts of implementing the proposed project.

## **SECTION 2      PROJECT INFORMATION**

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### **2.1      PROJECT TITLE**

Our Lady of Peace Church and Shrine Parking Lot Site Paving

### **2.2      PROJECT LOCATION**

The proposed project is located at 2800 Mission College Blvd., south of Our Lady of Peace Church, in Santa Clara (refer to Figures 2.1-1).

### **2.3      PROPERTY OWNER/PROPONENT**

Our Lady of Peace Church and Shrine  
Joe Mastroieni, Facilities Manager  
2800 Mission College Blvd.  
Santa Clara, CA 95054

### **2.4      LEAD AGENCY CONTACT**

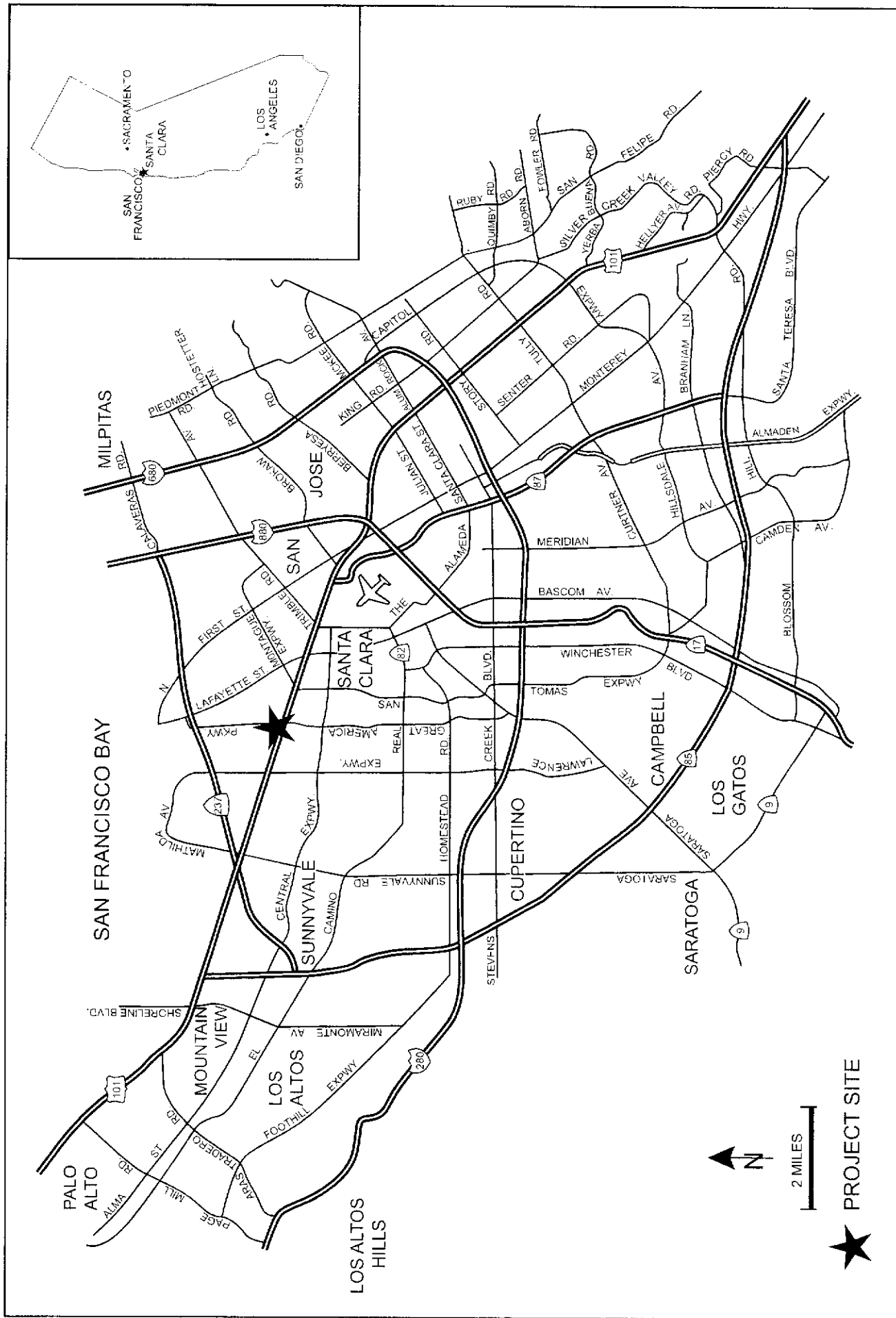
City of Santa Clara  
Julie Moloney, Associate Planner  
Planning Department  
City of Santa Clara  
1500 Warburton Avenue  
Santa Clara, CA 95050

### **2.5      ASSESSOR'S PARCEL NUMBERS**

104-16-089

### **2.6      ZONING DISTRICT AND GENERAL PLAN DESIGNATIONS**

Zoning District:                      *Agriculture*  
General Plan Designation:        *Institutional*

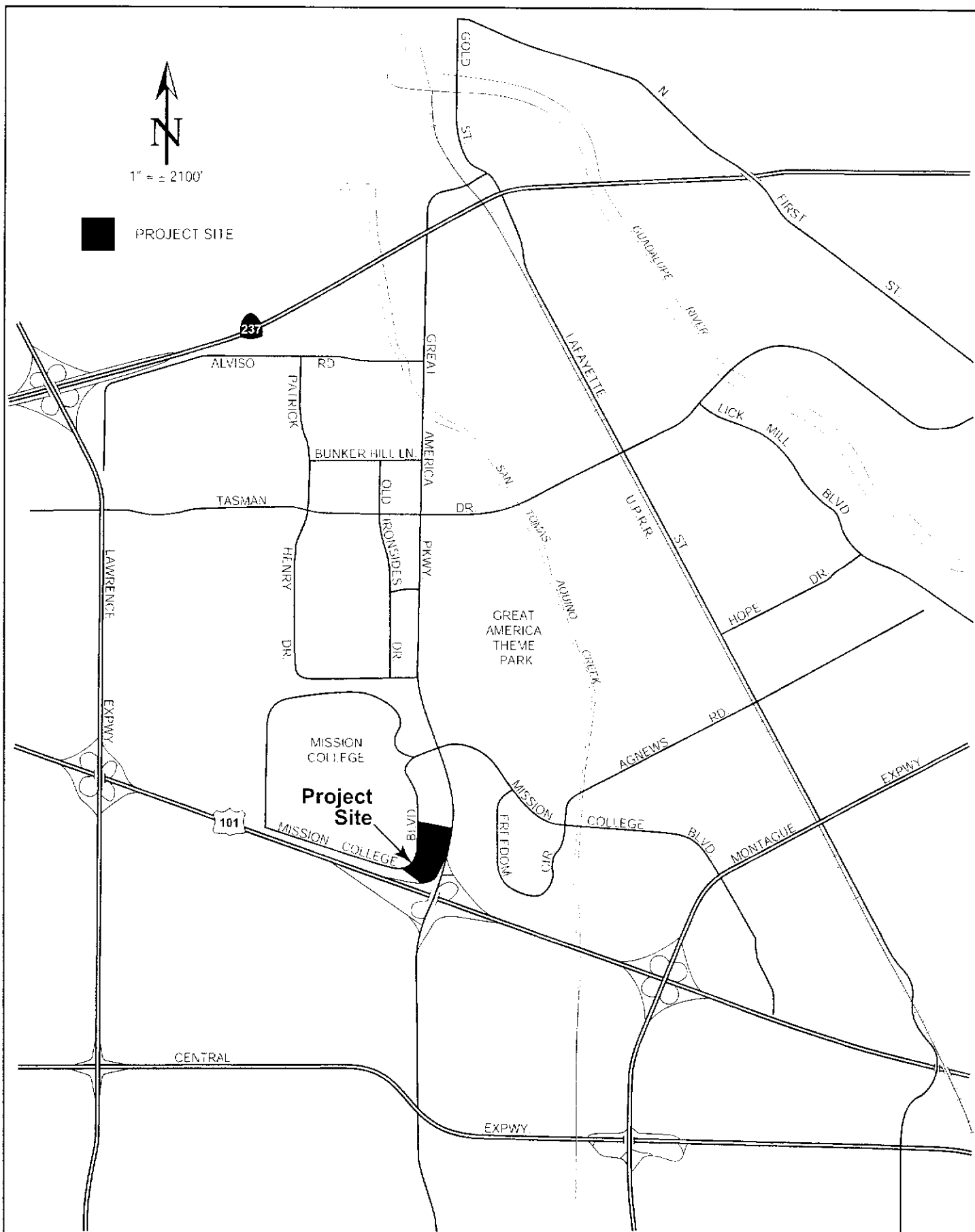


REGIONAL MAP

★ PROJECT SITE

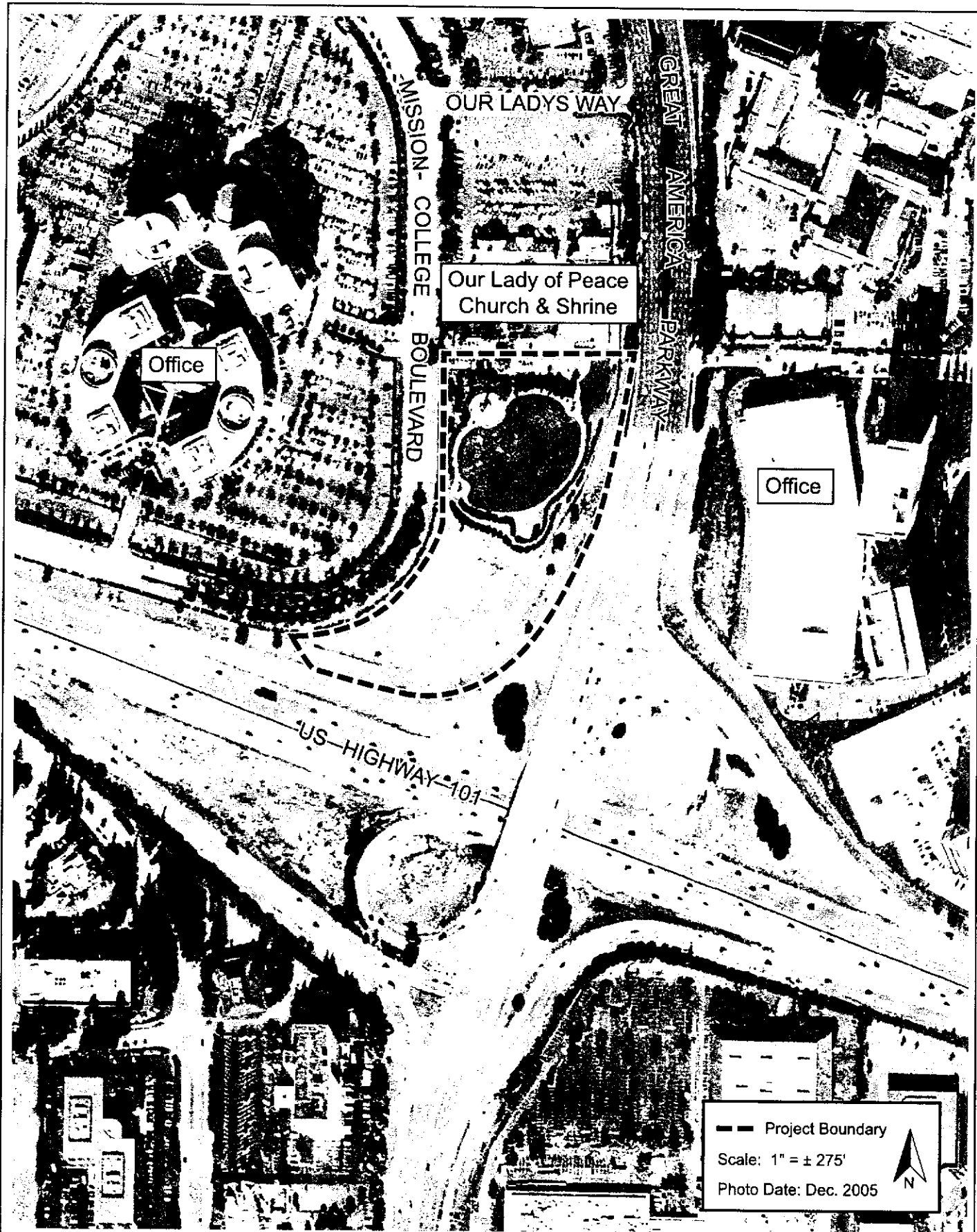
2 MILES

FIGURE 2.1-1



VICINITY MAP

FIGURE 2.1-2



AERIAL PHOTOGRAPH WITH SURROUNDING LAND USES

FIGURE 2.1-3

## SECTION 3      PROJECT DESCRIPTION

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### 3.1      SITE DEVELOPMENT

The project proposes to pave 2.28-acres of a 5.78-acre site for a church parking lot. The site is located at the northwestern quadrant of the interchange between Great America Parkway and US Highway 101 in the City of Santa Clara. The 2.28-acre site is currently vacant, undeveloped land that is occasionally utilized for overflow church parking. The site is a portion of the Our Lady of Peace Church and Shrine (OLOP) property. The proposed paved parking lot would provide overflow parking for OLoP during church services and events.

The proposed parking lot will provide 221 total parking spaces, 121 standard parking spaces and 100 compact spaces. Landscape islands with lighting are proposed within the site, as well as on the perimeter of the site. A one-way paved driveway is proposed parallel to Mission College Boulevard to provide vehicular and pedestrian access to the proposed overflow parking lot from the existing OLoP parking lot located northeast of the site. There is an unpaved driveway at the same location, currently. A gated driveway would also be located at the northwestern corner of the site. The driveway would provide controlled ingress/egress for vehicles during the periods of use for the parking lot.

The project site has a land use designation of *Institutional* in the Santa Clara General Plan and is zoned *Agricultural*. The *Institutional* land use designation includes activities such as (1) hospitals, and museums; and (2) other activities of a welfare or philanthropic nature that can not be considered a residential, commercial, or industrial activity. Churches and other religious sites that are not significant enough to be identified on the Land Use and Circulation Diagram are embedded in the residential land uses. The Our Lady of Peace Church and Shrine is a designated institutional site in Santa Clara.<sup>1</sup>

The project proposes to rezone the project site to *Public (B)* to allow for paving and development of 2.28-acres of the site. The proposed rezoning and subsequent use permit needed to implement the proposed project are addressed by this Initial Study.

A site plan of the proposed project is shown on Figure 3.1-1.

The parking lot is proposed as “overflow” capacity for the adjacent church complex. The dirt lot has sometimes been used for overflow parking in the past, but is not convenient when the surface is muddy or very dusty. It is anticipated that the parking lot will not be heavily utilized, except for holidays, large weddings, etc.

#### 3.1.1      Site Grading and Excavation

All electrical facilities will be installed underground. To accommodate this infrastructure, soil beneath and between the proposed lighting fixtures would be excavated to a depth of approximately five (5) feet below grade. The project proposes approximately 703 cubic yards of cut and 559 cubic yards of fill (limited off-haul).

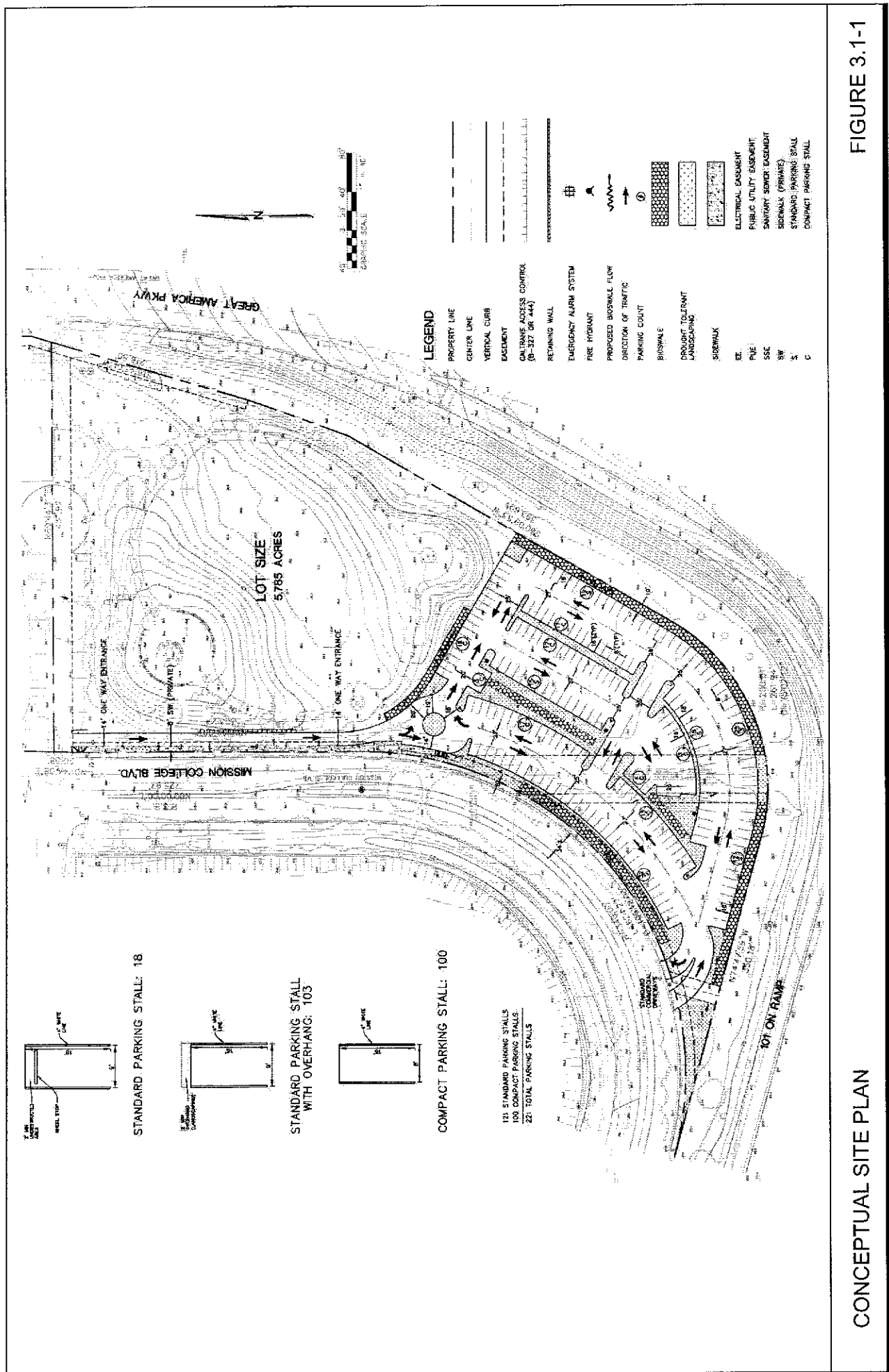
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<sup>1</sup> City of Santa Clara. City of Santa Clara General Plan 2000-2010. July 2002.

### 3.1.5

#### Site Access

Vehicle access to the project site would be from the proposed driveway off of Mission College Boulevard and from the proposed driveway linking the parking lot to the existing surface parking lot east of the site, that is adjacent to Our Lady of Peace Church. Pedestrian access to the site would be provided by a sidewalk along the proposed driveway linking the new parking lot to the existing surface parking lot.



## SECTION 4 ENVIRONMENTAL CHECKLIST AND DISCUSSION OF IMPACTS

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*This section describes the existing environmental conditions on and near the project area, as well as environmental impacts associated with the proposed project. The environmental checklist, as recommended in the California Environmental Quality Act (CEQA) Guidelines, identifies environmental impacts that could occur if the proposed project is implemented.*

*The right-hand column in the checklist lists the source(s) for the answer to each question. The sources cited are identified at the end of this section. Mitigation measures are identified for all significant project impacts. Measures that are standard and required by the City or law are categorized as "Standard Measures." Measures that are required to reduce significant impacts to a less than significant level are categorized as "Mitigation Measures."*

### 4.1 AESTHETICS

#### 4.1.1 Setting

As shown on the aerial photograph, the project site is currently partially developed with the Our Lady of Peace Shrine, which includes a large, open, grassy area. The grassy area is slightly sloped, circular, and is surrounded by an approximately ten-foot wide walkway. The Shrine is a 32-foot high, metal statue of the Virgin Mary located at the northeastern corner of the site. The southwestern portion of the site, where the paved parking lot is proposed, is a vacant, plowed field. The southern and western boundaries of the site are six-foot chain link fence. Landscape plantings are present along Mission College Boulevard and on the eastern boundary of the site, separating the future parking lot site and the existing shrine and surrounding walkway. Views of the site and adjacent shrine are shown in Photos 1-4.

The site is within a fully developed area in Santa Clara. The topography is flat and views of the eastern foothills are partially blocked by existing office structures in the area.

Visually, the surrounding area is predominantly high density office uses. East of the project site, across Mission College Boulevard, is an office campus with two five-story office buildings, and two nine-story concrete and glass office buildings with surrounding surface parking. North of the project site is a surface parking lot, the one-story Our Lady of Peace Church, a small one-story building and a two-story Learning Center. The church (circa 1970s) is a stucco building with a steeply pitched roof and one main entrance at the front of the building which faces south. The building immediately adjacent to the church is of similar character and design. The learning center is a newer (circa 1990s), stucco building located south of the church. South and east of the project site is the US Highway 101 on-ramp from Great America Parkway. The on ramp is set back from the edge of the site by an approximately 45-foot wide, sloped, open grassy area.

The project site is not located near a scenic highway or scenic vista.





Photo 1 - View of project site looking southwest towards US Highway 101.



Photo 2 - View from project site looking northeast towards adjacent Our Lady of Peace Shrine.

## PHOTOS 1 AND 2



Photo 3 - View of unpaved driveway along Mission College Boulevard, looking north.



Photo 4 - View of project site looking southeast from unpaved driveway, towards US Highway 101 on-ramp.

## PHOTOS 3 AND 4

## 4.1.2

**Environmental Checklist and Discussion of Impacts**

AESTHETICS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Have a substantial adverse effect on a scenic vista?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
2) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
3) Substantially degrade the existing visual character or quality of the site and its surroundings?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
4) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1

The proposed project would grade and pave the 2.28-acre, vacant, portion of the site for a new overflow parking lot for the Our Lady of Peace Church and Shrine. Landscaping trees are proposed on the perimeter and some locations within landscape medians on the site where they do not conflict with the bioswales proposed for stormwater treatment (see Section 4.8.2 of this Initial Study). This would soften views of the parking lot when viewed from some locations. The proposed parking lot would be at grade and would not block views from any of the surrounding uses.

The proposed parking lot will be set back approximately 10 to 12 feet from Mission College Boulevard right-of-way and approximately 40 feet from the shoulder of the on ramp for US Highway 101. The project will be consistent with the surrounding uses and is not anticipated to adversely affect visual quality in the area.

The project is bordered by office development, US Highway 101 and Our Lady of Peace Church. The project would include outdoor lighting similar to that found on existing surface parking lots surrounding Our Lady of Peace Church and the adjacent office campus across Mission College Boulevard. Lighting would be required to limit spillover onto adjacent properties. The parking lot would not be a significant source of glare during daytime hours. The project would not substantially change day or nighttime views in the area.

## 4.1.3

**Conclusion**

The proposed project would not result in significant, adverse visual or aesthetic impacts. [Less Than Significant Impact]

## 4.2 AGRICULTURAL RESOURCES

### 4.2.1 Setting

According to the Santa Clara County Important Farmland 2006 Map, the project site is designated *Urban and Built-Up Land*. *Urban and Built-Up Land* is defined as residential land with a density of at least six units per 10-acre parcel, as well as land used for industrial and commercial purposes, golf courses, landfills, airports, sewage treatment, and water control structures. Currently, the project site is not used for agricultural purposes.

### 4.2.2 Environmental Checklist and Discussion of Impacts

AGRICULTURAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,4
2) Conflict with existing zoning for agricultural use, or a Williamson Act contract?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,3,4
3) Involve other changes in the existing environment which, due to their location or nature, could result in conversion of Farmland, to non-agricultural use?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,4

The project site is not currently used for agricultural purposes and is not designated as farmland of any type. For these reasons, the proposed project would not result in a significant impact on agricultural resources.

### 4.2.3 Conclusion

The proposed project would not result in impacts to agricultural resources. [No Impact]

## 4.3 AIR QUALITY

### 4.3.1 Setting

#### 4.3.1.1 *Local and Regional Air Quality*

Air quality and the amount of a given pollutant in the atmosphere are determined by the amount of pollutant released and the atmosphere's ability to transport and dilute the pollutant. The major determinations of transport and dilution are wind, atmospheric stability, terrain, and for photochemical pollutants, sun light.

The project site is within the San Francisco Bay Area Air Basin. The Bay Area Air Quality Management District (BAAQMD) is the regional government agency that monitors and regulates air pollution within the air basin.

Both the U.S. Environmental Protection Agency and the California Air Resources Board have established ambient air quality standards for common pollutants. These ambient air quality standards are levels of contaminants which represent safe levels that avoid specific adverse health effects associated with each pollutant. The ambient air quality standards cover what are called "criteria" pollutants because the health and other effects of each pollutant are described in criteria documents. The major criteria pollutants are ozone, carbon monoxide, nitrogen dioxide (NO<sub>x</sub>) sulfur dioxide, and particulate matter.

Three pollutants are known at times to exceed the state and federal standards in the project area: ozone, particulates (PM<sub>10</sub>), and carbon monoxide. Both ozone and PM<sub>10</sub> are considered regional pollutants because their concentrations are not determined by proximity to individual sources, but show a relative uniformity over a region. Carbon monoxide is considered a local pollutant because elevated concentrations are usually only found near the source (e.g., congested intersections).

In addition to the criteria pollutants discussed above, Toxic Air Contaminants (TACs) are another group of pollutants of concern. There are many different types of TACs, with varying degrees of toxicity. Sources of TACs include industrial processes such as petroleum refining and chrome plating operations, commercial operations such as gasoline stations and dry cleaners, and motor exhaust. Cars and trucks release at least forty different toxic air contaminants. The most important, in terms of health risk, are diesel particulate, benzene, formaldehyde, 1,3-butadiene and acetaldehyde. Public exposure to TACs can result from emissions from normal operations, as well as accidental releases.

### **Sensitive Receptors**

BAAQMD defines sensitive receptors as facilities where sensitive receptor population groups (children, the elderly, the acutely ill and the chronically ill) are likely to be located. These land uses include residences, school playgrounds, childcare centers, retirement homes, convalescent homes, hospitals and medical clinics. There are no close receptors in close proximity to the project site.

## 4.3.2

**Environmental Checklist and Discussion of Impacts**

AIR QUALITY					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Conflict with or obstruct implementation of the applicable air quality plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,5
2) Violate any air quality standard or contribute substantially to an existing or projected air quality violation?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,5
3) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is classified as non-attainment under an applicable federal or state ambient air quality standard including releasing emissions which exceed quantitative thresholds for ozone precursors?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,5
4) Expose sensitive receptors to substantial pollutant concentrations?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,5
5) Create objectionable odors affecting a substantial number of people?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1

4.3.2.1 *Long-Term Air Quality Impacts*

BAAQMD has established thresholds for what would be considered a significant addition to existing air pollution. According to the BAAQMD CEQA guidelines, a project that generates more than 80 pounds per day of ozone precursors (i.e., reactive organic gases (ROG) and nitrogen oxides) is considered to have a potentially significant impact on regional air quality. On an annual basis, the threshold is 15 tons per year.

**Mobile Sources of Emissions**

The BAAQMD generally does not recommend a detailed air quality analysis for projects generating less than 2,000 vehicle trips per day, unless warranted by the specific nature of the project setting.<sup>2</sup> An estimated 200 vehicles could be parked at the site when the parking lot is in use (which would not be every day), but the parking lot is proposed to serve existing land uses and would not be creating any new daily trips. The proposed project, rezoning of the 5.78-acres site and construction and operation of a 2.28-acre parking lot, is not anticipated to generate 2,000 new daily vehicle trips, and, therefore, a detailed air quality analysis for mobile sources of air emissions was not completed.

<sup>2</sup> Bay Area Air Quality Management District. BAAQMD CEQA Guidelines. December 1999.

For a project that does not individually have significant operational air quality impacts, the determination of a significant cumulative air quality impact is based upon an evaluation of the consistency of the project with the local general plan and of the general plan with the most current Clean Air Plan (CAP). The proposed project, development of a vacant lot surrounded by urban uses and designated for an urban use, is consistent with the City of Santa Clara General Plan and the assumptions in the current CAP. The project, therefore, would not result in a significant cumulative impact.

#### **4.3.2.2      *Short-Term Air Quality Impacts***

Construction-related air quality impacts associated from the proposed project would be the result of dust creating activities, exhaust emissions of construction equipment and the use of typical construction materials such as asphalt and other construction materials that tend to volatilize into the atmosphere. Due to the negligible amount and short duration of these impacts, all are considered to be less than significant, except for the activities generating dust.

Construction activities such as excavation and grading operations and construction vehicles driving over and wind blowing over exposed earth, generate fugitive particulate matter that will affect local and regional air quality. The effects of these dust generating activities will be increased dustfall and locally elevated levels of PM<sub>10</sub> downwind of construction activity. Construction dust also has the potential for creating a nuisance at nearby properties.<sup>3</sup> If uncontrolled, dust generated by construction activities could be a significant impact.

**Impact AIR-1:**            Construction-generated dust, if uncontrolled, could result in a significant air quality impact. **[Significant Impact]**

#### **Mitigation and Avoidance Measures:**

**MM AIR-1.1:** The proposed project includes the following mitigation measures to reduce project construction impacts to a less than significant level.

- BAAQMD has prepared a list of feasible construction dust control measures that can reduce construction impacts to a level that is less than significant. The following construction practices shall be implemented during construction of the proposed project:
  - Water all active construction areas at least twice daily.
  - Cover all trucks hauling soil, sand, or other loose materials or require all trucks to maintain at least two feet of freeboard.
  - Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction site.
  - Sweep daily (with water sweepers) all paved access roads, parking areas and staging areas at construction sites.

---

<sup>3</sup> The word nuisance is used in this Initial Study to mean “annoying, unpleasant or obnoxious” and not in its legal sense.

- Sweep streets daily (with water sweepers) if visible soil material is carried onto adjacent public streets.
- Hydroseed or apply (non-toxic) soil stabilizers to inactive construction areas (previously graded areas inactive for ten days or more).
- Enclose, cover, water twice daily or apply (non-toxic) soil binders to exposed stockpiles (dirt, sand, etc.)
- Install sandbags or other effective erosion control measures to prevent silt runoff to public roadways.
- Replant vegetation in disturbed areas as quickly as possible.

#### 4.3.3 Conclusion

The proposed project would not result in significant long-term regional or local air quality impacts. Short-term air quality impacts associated with construction would be reduced to less than significant levels with the implementation of standard construction measures and mitigation measures. **[Less Than Significant Impact with Mitigation]**



#### **4.4 BIOLOGICAL RESOURCES**

The following biological resources discussion is based on a Burrowing Owl Monitoring Report prepared by *H.T. Harvey & Associates* in February 2008 and a Burrowing Owl Survey prepared by *H.T. Harvey and Associates* in April 2008. A copy of the burrowing owl survey and burrowing owl monitoring report can be found in Appendix A.

##### **4.4.1.1 *Existing Habitat***

The northeastern, 3.5-acre portion of the site is currently occupied by the Our Lady of Peace Shrine, a grassy area, a walking path, and a portion of the existing church parking area.

The southwestern, 2.28-acre portion of the project site is vacant land with a six-foot chain link fence on the eastern and southern boundaries of the site. The site consists of ruderal, or disturbed grassland habitat with ground squirrel burrows. Landscaping is present along Mission College Boulevard on the northern boundary of the site, separating the site from the adjacent Our Lady of Peace Shrine (refer to Photos 1-4).

The site is surrounded by office and institutional development with limited cover and foraging habitat for wildlife.

##### **4.4.1.2 *Special Status Species***

###### **Burrowing Owl**

The burrowing owl is listed by the State of California as a Species of Special Concern due to habitat loss caused by intense development of open, flat, grasslands in California. This species occupies a variety of habitats where the burrowing activities of small mammals provide suitable nesting habitat.

The project site has been graded and disturbed, but still provides suitable Burrowing Owl foraging habitat. During the protocol-level survey completed in April 2008, California ground squirrel burrows were observed on the project site and the adjacent grass habitat between the project site and US Highway 101. Because ground squirrel burrows provide potential sites for burrowing owls to roost or nest, additional protocol level surveys for burrowing owls were made by *H.T. Harvey & Associates* to determine whether owls were present on the site.

No burrowing owls, nor evidence of burrowing owl presence, was detected on or within 250 feet of the site. No special status animal or plant species are located on the project site.

##### **4.4.1.3 *Trees***

No trees are present on the project site.

## 4.4.2

**Environmental Checklist and Discussion of Impacts**

BIOLOGICAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2,6
2) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, regulations, or by the California Department of Fish and Game or U.S. Fish and Wildlife Service?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
3) Have a substantial adverse effect on federally protected wetlands as defined by Section 404 of the Clean Water Act (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
4) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, impede the use of native wildlife nursery sites?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,6
5) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
6) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

#### 4.4.2.1 *Impacts to Special Status Species*

As previously discussed, special status plant and wildlife species are not present on the site. A protocol survey was conducted in accordance with the California Department of Fish and Game's (CDFG's) protocols, during the primary burrowing owl breeding season (April 15-July 15); no evidence of burrowing owl presence was detected on or within 250 feet of the site.

Although burrowing owls were not observed on the site and have not been known to occur on the site, they have been found throughout the general project area. Given the flat, undeveloped nature of the site, there is a potential for owls to locate onto the site at any time. Development of the proposed project could result in impacts to individual burrowing owls if owls moved onto the site prior to project construction. If owls are using active nests when construction activity commences, grading of the site could result in destruction of nests and individual owls.

**Standard Measure:** The proposed project includes the following standard measures to reduce project impacts to a less than significant level.

- Pre-construction Surveys. Pre-construction surveys for burrowing owls should be conducted in potential habitat in conformance with CDFG protocols, no more than 30 days prior to the start of construction. If no Burrowing Owls are located during these surveys, no additional action would be warranted. However, if Burrowing Owls are located on or immediately adjacent to (i.e., within 250 ft of) the site the following mitigation measures will be implemented.
- Buffer Zones. If Burrowing Owls are present during the nonbreeding season (generally 1 September to 31 January), a 150-foot (ft) buffer zone should be maintained around the occupied burrow(s) if practicable. If such a buffer is not practicable, a reduced buffer is acceptable during the nonbreeding season as long as the burrow will not be directly impacted (in which case passive relocation should be implemented). During the breeding season (generally 1 February to 31 August), a 250-ft buffer, within which no new activity will be permissible, will be maintained between project activities and occupied burrows. Owls present on site after 1 February will be assumed to be nesting on or adjacent to the site unless evidence indicates otherwise. This protected area will remain in effect until 31 August, or based upon monitoring evidence, until young owls are foraging independently or the nest is no longer active.
- Passive Relocation. If construction will directly impact occupied burrows, eviction of owls should occur outside the nesting season to prevent injury or mortality of individual owls. No burrowing owls will be evicted from burrows during the nesting season (1 February through 31 August) unless evidence indicates that nesting is not actively occurring (e.g., because the owls have not yet begun nesting early in the season, or because young have already fledged late in the season). Relocation of owls during the nonbreeding season will be performed by a qualified biologist using one-way doors, which should be installed in all burrows within the impact area and left in place for at least two nights. These one-way doors will then be removed and the burrows backfilled immediately prior to the initiation of grading.

#### 4.4.2.2 *Impacts to Mature Trees*

Since there are no trees present on the site, the project is not proposing any tree removal.

#### 4.4.3 Conclusion

The proposed project would not result in any biological impacts to the site. [Less Than Significant Impact with Mitigation]

## 4.5 CULTURAL RESOURCES

The discussion in this section is primarily based on an archaeological literature review prepared by *Holman and Associates, Archaeological Consultants* in April 2008. A copy of the archaeological literature review is on-file with the City of Santa Clara.

### 4.5.1 Setting

A prehistoric and historic site record and literature search was completed by the California Historical Resources Information System, Northwest Information Center, Sonoma State University, Rohnert Park on April 28, 2008.

#### 4.5.1.1 *Prehistoric and Historic Resources*

The property is located in an area of moderate to low archaeological sensitivity. The prehistoric and historic records search revealed that no prehistoric or historic era sites have been recorded in or adjacent to the project parcel. One probable site, C-915, has been recorded west of the project area along an artificial drainage. The site was described as "a prehistoric site characterized by midden soil fire altered rock and chipped lithics," by Robert Cartier in 1991.<sup>4</sup>

There is no evidence of recorded historic and/or prehistoric archaeological resources inside or immediately adjacent to the project area.

### 4.5.2 Environmental Checklist and Discussion of Impacts

CULTURAL RESOURCES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Cause a substantial adverse change in the significance of an historical resource as defined in §15064.5?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,6,7,8
2) Cause a substantial adverse change in the significance of an archaeological resource as defined in §15064.5?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,6,7
3) Directly or indirectly destroy a unique paleontological resource or site, or unique geologic feature?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,6,7
4) Disturb any human remains, including those interred outside of formal cemeteries?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,6,7

#### 4.5.2.1 **Buried Prehistoric and Historic Resources**

<sup>4</sup> Holman & Associates. *Archaeological Literature Review for the Our Lady of Peace Parking Lot*. April 30, 2008.

Based on relevant archaeological reports for the immediate area, the proposed project should have no effect on archaeological resources. The proposed paving project does include disturbance of native soils for trenching, site grading and other construction activities. Although it is unlikely that buried cultural materials would be encountered, standard conditions for excavation activities would be applied to the project as described below.

**Mitigation Measure:** The proposed project shall implement the following standard measure:

- As required by County ordinance, this project has incorporated the following guidelines. - Pursuant to Section 7050.5 of the Health and Safety Code, and Section 5097.94 of the Public Resources Code of the State of California in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the Native American Heritage Commission who shall attempt to identify descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the land owner shall re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.

#### **4.5.3        Conclusion**

The proposed project, with the implementation of the above mitigation measure, would not result in significant impacts to cultural resources. **[Less Than Significant Impact with Mitigation]**

## 4.6 GEOLOGY AND SOILS

The following discussion is based on a Geotechnical Investigation prepared by *Cleary Consultants, Inc.* in March 2008. A complete version of the report can be found in Appendix B.

### 4.6.1 Setting

#### 4.6.1.1 *On-Site Geologic Conditions*

##### Soils

The site soils are described in *Soils of Santa Clara County* (1968) as Pacheco loams (Pf). A small wedge of the western and central portion of the 2.28-acre portion of the site consists of Campbell silty clay loam (Cc).<sup>5</sup> The silty clay soils encountered in the upper three to four feet have a high to critical expansion potential. Expansive soils shrink and swell as a result of moisture changes. These changes can cause heaving and cracking of slabs-on-grade, pavements and structures found on shallow foundations. Because the site topography is flat, there are limited erosion hazard and no landslide hazard.

Groundwater was not encountered at the site during drilling for borings.

##### Seismicity

The San Francisco Bay Area is one of the most seismically active regions in the United States. Santa Clara County is classified as Zone 4, the most seismically active zone. An earthquake of moderate to high magnitude generated within the San Francisco Bay region could cause considerable ground shaking at the project site. The degree of shaking is dependent on the magnitude of the event, the distance to its zone of rupture and local geologic conditions.

The three major faults in the region are the San Andreas Fault, the Calaveras Fault, and the Hayward Fault. The San Andreas Fault runs north/south and parallel to the Hayward Fault and the Calaveras Fault. The San Andreas Fault is approximately 12 miles west of the site, the Calaveras Fault is approximately 11 miles east of the site, and the Hayward Fault is approximately eight (8) miles north of the site. The Silver Creek Fault is the nearest fault to the site, located approximately 3.5 miles east of the site.

The project site is not located within a fault rupture zone.<sup>6</sup>

##### Liquefaction

Soil liquefaction is a condition where saturated granular soils near the ground surface undergo a substantial loss of strength during seismic events. Loose, water-saturated soils are transformed from a solid to a liquid state during ground shaking. Liquefaction can result in significant deformations. Soils most susceptible to liquefaction are loose, uniformly graded, saturated, fine-grained sands that lie close to the ground surface. The project site is located within a State of California Seismic Hazard Zone for liquefaction.<sup>7</sup>

<sup>5</sup> United States Department of Agriculture, Soil Conservation Service, *Soils of Santa Clara County*, 1968, and County of Santa Clara Department of Public Works, *Soil Map Sheet 11*, 1964.

<sup>6</sup> California Department of Conservation, *Geologic Map of the San Francisco-San José Quadrangle*, 1990.

<sup>7</sup> <http://www.abag.ca.gov/bayarea/eqmaps/liqefac/liqefac.html> April 23, 2008

## Lateral Spreading

Lateral spreading is a type of ground failure related to liquefaction. It consists of the horizontal displacement of flat-lying alluvial material toward an open area, such as a steep bank of a stream channel. There are no stream channels on or adjacent to the site that would be subject to substantial lateral spreading.

### 4.6.2 Environmental Checklist and Discussion of Impacts

GEOLOGY AND SOILS					Information Source(s)
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
Would the project:					
1) Expose people or structures to potential substantial adverse effects, including the risk of loss, injury, or death involving:					
a) Rupture of a known earthquake fault, as described on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to Division of Mines and Geology Special Publication 42.)	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,11
b) Strong seismic ground shaking?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,10,11
c) Seismic -related ground failure, including liquefaction?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,10,11
d) Landslides?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
2) Result in substantial soil erosion or the loss of topsoil?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,9,10
3) Be located on a geologic unit or soil that is unstable, or that will become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction or collapse?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,9,10
4) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994), creating substantial risks to life or property?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,9,10
5) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,10

The project site is located in a mapped liquefaction hazard zone, and soils on the site have a moderate potential for expansion. The project site is not located within a fault rupture zone or landslide hazard zone.

The project site is located in a seismically active region. Geologic conditions on the site will require that the new paved parking lot be designed and constructed in accordance with standard engineering techniques and Uniform Building Code guidelines for Seismic Zone 4, to avoid or minimize potential damage from seismic shaking and liquefaction on the site.

The proposed parking lot will be designed and constructed in accordance with a design-level geotechnical investigation prepared for the site, which will identify the specific design features that will be required for the project, including site preparation, recompaction and lime treatment of subgrade solid, fill replacement and compaction, trench excavations, surface drainage, flexible pavements, slabs-on-grade and curbs, landscape retaining walls, and foundations. With implementation of recommendations in the design level geotechnical report, the project will not expose people or property to significant impacts associated with geologic or seismic conditions on site.

#### **4.6.3            Conclusion**

The proposed project would not result in significant, adverse geology, soils, or seismicity impacts that cannot be avoided through standard engineering and construction techniques. **[Less Than Significant Impact]**



## 4.7 HAZARDS AND HAZARDOUS MATERIALS

### 4.7.1 Setting

#### 4.7.1.1 *Background Information*

Hazardous materials encompass a wide range of substances, some of which are naturally-occurring and some of which are man-made. Examples of hazardous materials include pesticides, herbicides, petroleum products, metals (e.g., lead, mercury, arsenic), asbestos and chemical compounds used in manufacturing. Determining if such substances are present on or near project sites is important because exposure to hazardous materials above certain thresholds can result in adverse health effects on humans, as well as harm to plants and wildlife.

Due to the fact that these substances have properties that, above certain thresholds, are toxic to humans and/or the ecosystem, there are multiple regulatory programs in place that are designed to minimize the chance for unintended releases and/or exposures to occur. Other programs establish remediation requirements for sites where contamination has occurred.

#### 4.7.1.2 *Site Conditions*

The 2.28-acre portion of the project site is currently undeveloped, vacant land. It is likely the site was previously utilized for agricultural purposes and has remained vacant since the cessation of agricultural activities. The project site is located in a developed, office area. Surrounding land uses include office and public use operations such as the Our Lady of Peace Church and Shrine immediately to the east and office buildings to the north and south.

#### 4.7.1.3 *Potential On-Site Sources of Contamination*

##### **Former Agricultural Use**

Due to the agricultural history of the project site, it is likely that agricultural chemicals, such as pesticides (including organochlorine pesticides), herbicides, and fertilizers, were used on the site. Pesticides and other agricultural chemicals used historically in the Santa Clara Valley can persist on a site long after its use for agriculture has ceased. Due to previous agricultural use, there is a potential for organochloride pesticides and metal contamination in surface soils.

### 4.7.2 Environmental Checklist and Discussion of Impacts

HAZARDS AND HAZARDOUS MATERIALS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project: 1) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1

HAZARDS AND HAZARDOUS MATERIALS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
2) Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
3) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within one-quarter mile of an existing or proposed school?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
4) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
6) For a project within the vicinity of a private airstrip, would the project result in a safety hazard for people residing or working in the project area?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
7) Impair implementation of, or physically interfere with, an adopted emergency response plan or emergency evacuation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
8) Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

#### 4.7.2.1 On-Site Sources of Contamination

Placing a parking lot at this location would not result in sensitive receptors coming into contact with the soil or groundwater beneath the site.

Future development on the site would not result in any significant use of hazardous materials other than small amounts of herbicides and pesticides that may be used for maintaining landscaping. The use of these materials would not result in a significant hazardous materials impact.

#### **4.7.2.2      *Other Hazards***

The project site is not within the Santa Clara County Airport Land Use Commission (ALUC) jurisdiction, nor is it on a City designated evacuation route. The site is located near areas subject to wildfires, however the site is not located in a fire threatened community.<sup>8</sup>

#### **4.7.3              Conclusion**

The proposed project will not result in hazardous materials impacts to workers and future users of the site. **(Less Than Significant Impact)**

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<sup>8</sup> Association of Bay Area Governments. (ABAG). Wildfire Hazard Maps and Information. November 2004. 8 May 2008. <http://www.abag.ca.gov/bayarea/eqmaps/wildfire/>.

## 4.8 HYDROLOGY AND WATER QUALITY

### 4.8.1 Setting

#### 4.8.1.1 *Hydrology and Flooding*

According to the Federal Emergency Management Agency's (FEMA) Flood Insurance Rate Map (FIRM), the project site is located within Zone B. Zone B is defined as areas between the limits of a 100-year flood and a 500-year flood, or certain areas subject to 100-year flooding with average depths of less than one foot, as well as areas where the contributing drainage area is less than one square-mile.<sup>9</sup> The existing elevation of the site ranges from approximately 22 feet to 24 feet above mean sea level (msl).

The proposed project site is located approximately 2,720 feet east of the Calabazas Creek and 2,370 feet west of the San Tomas Aquino Creek. There are no dams or levee systems in the project area. The project area is not subject to inundation from a seiche, tsunami, or mudflow.

#### 4.8.1.2 *Storm Drainage*

The City of Santa Clara owns and maintains the municipal storm drainage system in the vicinity of the project.

#### 4.8.1.3 *Water Quality*

The federal Clean Water Act and California's Porter-Cologne Water Quality Control Act are the primary laws related to water quality. Regulations set forth by the U.S. Environmental Protection Agency (EPA) and the State Water Resources Control Board have been developed to fulfill the requirements of this legislation. EPA's regulations include the National Pollutant Discharge Elimination System (NPDES) permit program, which controls sources that discharge pollutants into waters of the United States (e.g., streams, lakes, bays, etc.). These regulations are implemented at the regional level by water quality control boards, which for the Santa Clara area is the San Francisco Bay Regional Water Quality Control Board (RWQCB).

The Santa Clara Valley Urban Runoff Pollution Prevention Program (SCVURPPP) was developed in accordance with the requirements of the revised 1995 version of the San Francisco Bay Basin Water Quality Control Plan, for the purpose of reducing water pollution associated with urban stormwater runoff. The SCVURPPP was also designed to fulfill the requirements of Section 304(1) of the Federal Clean Water Act, which mandated that the Environmental Protection Agency develop the NPDES requirements for stormwater discharges, including those from municipal storm drain systems and construction sites. The SCVURPPP, of which the City of Santa Clara is a participant, was developed in accordance with the requirements of the RWQCB's *San Francisco Bay Basin Water Quality Control Plan*, as well as the requirements of EPA's NPDES permit program.

Additional water quality control measures were approved in October 2001 (revised in 2005), when the RWQCB adopted an amendment to the NPDES permit for Santa Clara County. This amendment, which is commonly referred to as "C.3" (referring to the applicable section of the permit amendment), requires all new and redevelopment projects that result in the addition or replacement

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<sup>9</sup> Federal Emergency Management Agency, Flood Insurance Rate Map, Community Panel No. 060350 0001C, July 16, 1980.

of impervious surfaces totaling 10,000 square feet or more, be designed with Best Management Practices (BMPs) that reduce stormwater pollution through source control measures and stormwater treatment measures.

The proposed project is required to comply with Provision C.3 of the City's NPDES permit and the City's local policies and ordinances regarding urban runoff and water quality. In practical terms, the C.3 requirements seek to reduce water pollution by both reducing the volume of stormwater runoff and the amount of pollutants that are contained within the runoff. The methods used to achieve these objectives vary from site to site, but can include measures such as a reduction in impervious surfaces, onsite detention facilities, biofiltration swales, settlement/debris basins, etc.

#### 4.8.2 Environmental Checklist and Discussion of Impacts

HYDROLOGY AND WATER QUALITY					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Violate any water quality standards or waste discharge requirements?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
2) Substantially deplete groundwater supplies or interfere substantially with groundwater recharge such that there would be a net deficit in aquifer volume or a lowering of the local groundwater table level (e.g., the production rate of pre-existing nearby wells would drop to a level which would not support existing land uses or planned uses for which permits have been granted)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
3) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, in a manner which would result in substantial erosion or siltation on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
4) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river, or substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2

HYDROLOGY AND WATER QUALITY					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
5) Create or contribute runoff water which would exceed the capacity of existing or planned storm water drainage systems or provide substantial additional sources of polluted runoff?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
6) Otherwise substantially degrade water quality?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	1,2
7) Place housing within a 100-year flood hazard area as mapped on a Federal Flood Hazard Boundary or Flood Insurance Rate Map or other flood hazard delineation map?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2,13
8) Place within a 100-year flood hazard area structures which would impede or redirect flood flows?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	13
9) Expose people or structures to a significant risk of loss, injury, or death involving flooding, including flooding as a result of the failure of a levee or dam?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
10) Be subject to inundation by seiche, tsunami, or mudflow?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2

#### 4.8.2.1 *Drainage and Flooding*

The proposed project would conform to the City flood hazard management ordinance, therefore, implementation of the project would not result in people or structures being exposed to any significant flood risk.

Impervious surfaces on the project site would be increased from four percent to 75 percent after construction of the project, as shown in Table 4.8-1. New landscaping and vegetated bioswales would be installed on site as part of the project, and would help to detain stormwater runoff and infiltrate excess water into the soil along the Caltrans right-of-way bordering the site, and leading to the existing culvert along Great America Parkway. This would ensure that stormwater runoff from the project site would not exceed the capacity of the existing storm drainage system, or contribute significantly to downstream flooding. Figure 4.8-1 shows the stormwater treatment areas for the project site.

## FIGURE 4.8-1



Table 4.8-1 Pervious and Impervious Surfaces On-Site						
Site Surface	Existing/Pre-Construction (sf)	%	Project/Post-Construction (sf)	%	Difference (sf)	%
<b>Impervious</b>						
Parking/Driveways						
Sidewalks/Patios/Paths/Shrine	9,800	4%	89,870	75%	80,070	75%
<i>Subtotal</i>	<i>9,800</i>		<i>89,870</i>	<i>75%</i>	<i>80,070</i>	<i>75%</i>
<b>Pervious</b>						
Existing Shrine						
Landscaping	135,900	54%				
Landscaping	106,295	42%	26,225	25%	-80,070	-75%
<i>Subtotal</i>	<i>251,995</i>		<i>26,225</i>	<i>25%</i>	<i>-80,070</i>	<i>-75%</i>
<b>TOTAL</b>	<b>251,995</b>		<b>106,295</b>			

#### 4.8.2.2 Water Quality

The project proposes paving 2.28-acres of the 5.78-acre site for a 221 space overflow parking lot, along with landscaping and lighting on the site.

The project includes stormwater quality best management practices such as directing site runoff into vegetated swales in conformance with requirements in the City of Santa Clara's Municipal NPDES Permit. The coverage of impervious surfaces would be more than the current condition. Vegetated swales may be located in or adjacent to trees and shrubs, but must include only vegetation consistent with their function.

Construction activities on site would temporarily generate dust, sediment, litter, oil, paint, and other pollutants that could contaminate runoff from the site.

**Impact HYDRO-1:** Construction activities could temporarily increase pollutant loads in stormwater runoff. **[Significant Impact]**

#### Mitigation and Avoidance Measures:

The following mitigation measures are included in the project to reduce water quality impacts during construction and post-construction periods to a less than significant level:

**MM HYDRO-1.1:** Prior to construction of the project, the City shall require the applicant to submit a Storm Water Pollution Prevention Plan (SWPPP) and a Notice of Intent (NOI) to the State of California Water Resource Quality Control Board to control the discharge of storm water pollutants including sediments associated with construction activities. Along with these documents, the applicant may also be required to prepare an Erosion Control Plan. The Erosion Control Plan may include Best Management Practices (BMPs) as specified in the California Storm Water Best Management Practice Handbook (such as silt fences/straw waddles around the perimeter of the site, regular



street cleaning, and inlet protection) for reducing impacts on the City's storm drainage system from construction activities. The SWPPP shall include control measures during the construction period for:

- Soil stabilization practices,
- Sediment control practices,
- Sediment tracking control practices,
- Wind erosion control practices, and
- Non-storm water management and waste management and disposal control practices.

**MM HYDRO-1.2:** Prior to issuance of a grading permit, the applicant shall be required to submit copies of the NOI and Erosion Control Plan (if required) to the Department of Public Works. The applicant shall also be required to maintain a copy of the most current SWPPP on-site and provide a copy to any City representative or inspector on demand.

**MM HYDRO-1.3:** The development shall comply with City of Santa Clara ordinances, including erosion- and dust-control during site preparation and grading, and maintaining adjacent streets free of dirt and mud during construction.

**MM HYDRO-1.4:** The proposed development shall comply with the NPDES permit issued to the City of Santa Clara.

#### **4.8.3        Conclusion**

The proposed project would not result in substantial adverse flooding or drainage impacts. **[Less Than Significant Impact]**

With implementation of the mitigation measures included in the project, possible impacts to water quality would be reduced to a less than significant level. **[Less Than Significant Impact with Mitigation]**

## 4.9 LAND USE

### 4.9.1 Setting

The 3.5-acre eastern portion of the project site is developed with the Our Lady of Peace Shrine, a large grassy knoll area and a surrounding walkway.

The 2.28-acre western portion of project site proposed for developing a paved, surface parking lot is vacant land. Even unpaved, the site has been utilized as an overflow parking lot for the Our Lady of Peace Church and Shrine.

#### 4.9.1.1 *Existing General Plan and Zoning*

##### **General Plan Land Use Designation**

The project site is designated as *Institutional* in the City's General Plan. The *Institutional* land use designation includes activities such as (1) hospitals, and museums; and (2) other activities of a welfare or philanthropic nature that can not be considered a residential, commercial, or industrial activity. Churches and other religious sites that are not significant enough to be identified on the Land Use and Circulation Diagram are embedded in the residential land uses. Our Lady of Peace Church and Shrine is a designated institutional site in the General Plan.<sup>10</sup>

##### **Zoning Designation**

The project site has a zoning designation of *Agricultural*. The *Agricultural* designation is intended to provide for the protection of existing agricultural lands, to encourage the preservation and the retention of the land in its natural state and to provide an interim zoning for lands newly annexed to the City. Maximum building height under this zoning designation is 35 feet.

#### 4.9.1.2 *Surrounding Land Uses*

Surrounding properties are developed with office, public (church facilities), and roadway uses. Our Lady of Peace Church is located immediately north of the project site. Office uses are located to the north and south of the site, across Mission College Boulevard and Great America Parkway, respectively. The US Highway 101 on ramp is located to the south and east of the project site.

### 4.9.2 Environmental Checklist and Discussion of Impacts

LAND USE					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project: 1) Physically divide an established community?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2

<sup>10</sup> City of Santa Clara. *City of Santa Clara General Plan 2000-2010*. July 2002.

LAND USE					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
2) Conflict with any applicable land use plan, policy, or regulation of an agency with jurisdiction over the project (including, but not limited to the general plan, specific plan, local coastal program, or zoning ordinance) adopted for the purpose of avoiding or mitigating an environmental effect?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
3) Conflict with any applicable habitat conservation plan or natural community conservation plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2

#### 4.9.2.1 *Proposed General Plan and Zoning*

The project proposes to pave 2.28-acres of the 5.78-acre site with a 221 space surface parking lot, as well as provide landscaping, lighting and access for the parking lot. The existing Shrine and the proposed use would be consistent with allowed uses for the *Institutional* land use designation.

The project is proposing a zoning designation change from *Agricultural* to *Public*. The *Public* designation is intended to provide for public, quasi-public and public park facilities as specific land use developments. The proposed project would be consistent with the *Public* zoning designation as a conditional use. Churches are eligible for the conditional use permit under the *Public* zoning designation. The adjacent parcel to the northeast is also zoned *Public*, therefore, the zoning designation change would be consistent with the proposed use, and with the surrounding uses.

#### 4.9.2.2 *Land Use Compatibility*

Land use conflicts can arise from two basic causes: 1) a new development or land use may cause impacts to persons or the physical environment in the vicinity of the project site or elsewhere; or 2) conditions on or near the project site may have impacts on the persons or development introduced onto the site by the new project. Both of these circumstances are aspects of land use compatibility. Potential incompatibility may arise from placing a particular development or land use at an inappropriate location, or from some aspect of the project's design or scope. Depending on the nature of the impact and its severity, land use compatibility conflict can range from minor irritation and nuisances to potentially significant effects on human health and safety. The discussion below distinguishes between potential impacts from the proposed project upon people and the physical environment, and potential impacts from the project's surroundings upon the project itself.

#### **Impacts From the Project**

The proposed project will change the character of the project site. The project will develop a portion of the site with a paved, 221 space parking lot. The proposed project is not located immediately adjacent to existing sensitive land uses such as residences or schools. While the project would introduce new sources of noise and lighting, increases would not be significantly different from adjacent uses (church, freeway, offices) and are not anticipated to adversely affect adjacent office

properties or exceed restrictions in the City's zoning ordinance. The proposed project, therefore, would not result in land use compatibility impacts to adjacent uses.

### **Impacts to the Project**

The proposed project would develop a partially vacant, undeveloped site with a paved, surface parking lot that is compatible with both the existing and planned land uses in the area. No on-going land use conflicts with adjacent uses are anticipated.

#### **4.9.3        Conclusion**

The proposed project would not result in significant, adverse land use impacts. **[Less Than Significant Impact]**

#### 4.10 MINERAL RESOURCES

##### 4.10.1 Setting

The project site does not contain any known or designated mineral resources.

##### 4.10.2 Environmental Checklist and Discussion of Impacts

MINERAL RESOURCES					Information Source(s)
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	
Would the project:					
1) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
2) Result in the loss of availability of a locally-important mineral resource recovery site delineated on a local general plan, specific plan or other land use plan?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2

The project would not result in the loss of availability of a known mineral resource, and no mineral excavation sites are present within the general area. The proposed project, therefore, would not result in impacts to mineral resources.

##### 4.10.3 Conclusion

The project would not result in impacts to known mineral resources. [No Impact]

## **4.11 NOISE**

### **4.11.1 Setting**

#### **4.11.1.1 *Noise Background***

Noise is defined as unwanted sound. Noise can be disturbing or annoying because of its pitch or loudness. Pitch refers to relative frequency of vibrations, higher pitch signals sound louder to people.

A decibel (dB) is measured based on the relative amplitude of a sound. Ten on the decibel scale marks the lowest sound level that a healthy, unimpaired human ear can detect. Sound levels in decibels are calculated on a logarithmic basis such that each 10 decibel increase is perceived as a doubling of loudness. The California A-weighted sound level, or dBA, gives greater weight to sounds to which the human ear is most sensitive.

Sensitivity to noise increases during the evening and at night because excessive noise interferes with the ability to sleep. Twenty-four hour descriptors have been developed that emphasize quiet-time noise events. The Day/Night Average Sound Level,  $L_{dn}$ , is a measure of the cumulative noise exposure in a community. It includes a 10 dB addition to noise levels from 10:00 PM to 7:00 AM to account for human sensitivity to night noise.

#### **4.11.1.2 *Applicable Noise Standard***

The Environmental Quality Element of the City of Santa Clara's General Plan identifies noise and land use compatibility standards for various land uses (General Plan Figure 5-G). The City establishes 55 DNL as the noise limit for public/educational land uses. Chapter 9.10 "Regulation of Noise and Vibration," of the City of Santa Clara Municipal Code identifies allowable hours for construction to limit impacts to sensitive uses.

#### **4.11.1.3 *Existing Noise Environment***

Based on the Figure 5-L of the General Plan (*2005 Traffic Noise Levels (dBA, CNEL) – North Santa Clara*), noise levels on the site were estimated at 75 dBA. The site is outside of the 65 dB CNEL contour for the Norman Y. Mineta San José International Airport.<sup>11</sup>

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<sup>11</sup> Airport Land Use Commission. Land Use Plan for Areas Surrounding Santa Clara County Airports. September 1992.

## 4.11.2

**Environmental Checklist and Discussion of Impacts**

NOISE					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project result in:					
1) Exposure of persons to or generation of noise levels in excess of standards established in the local general plan or noise ordinance, or applicable standards of other agencies?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1,2
2) Exposure of persons to, or generation of, excessive groundborne vibration or groundborne noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
3) A substantial permanent increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
4) A substantial temporary or periodic increase in ambient noise levels in the project vicinity above levels existing without the project?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
5) For a project located within an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
6) For a project within the vicinity of a private airstrip, would the project expose people residing or working in the project area to excessive noise levels?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

**4.11.2.1 Noise Exposure Impacts to the Project**

The proposed project would be subject to noise primarily from traffic on nearby roadways including: US Highway 101, Mission College Boulevard and Great America Parkway. Noise levels at the project site would most likely exceed the 55 dBA DNL noise limit considered compatible for public uses in the General Plan. Although noise levels for the project site would likely exceed the limit for public uses, the proposed use for the site is a parking lot, and would not expose people to high levels of noise for any length of time that would cause an impact. Therefore, noise reduction measures would not be required to reduce noise levels for the project site.

#### **4.11.2.2      *Noise Impacts From Project Traffic***

The project site is located in an area of existing office and public uses. No residential or other sensitive uses are adjacent or close to the project site.

Operation of the proposed surface parking lot will increase noise levels on the site. Traffic increases due to the project would not represent a doubling of traffic on any neighboring streets and traffic noise from the project would not result in a substantial increase in ambient noise levels. The noise produced by the proposed project, therefore, would not result in significant noise impacts.

#### **4.11.2.3      *Noise Impacts From Construction***

The pavement and construction of the proposed parking lot project would generate noise, and would temporarily increase noise levels at adjacent public and office land uses. The significance of noise impacts during construction depends on the noise generated by various pieces of construction equipment, the timing and duration of noise generating activities, and the distance between construction noise sources and noise sensitive receptors. The paving of the proposed surface parking lot would generate noise and would temporarily increase noise at adjacent offices and Our Lady of Peace Church and Shrine. Drilling would not be required during the construction of the parking lot.

Construction activities generate considerable amounts of noise, especially during the construction of project infrastructure when heavy equipment is used. Typical hourly average construction generated noise levels are about 75 dBA to 80 dBA measured at a distance of 100 feet from the source during busy construction periods (e.g., earth moving equipment, impact tools, etc.). Construction generated noise levels drop off at a rate of about six dBA per doubling of distance between the source and receptor.

Construction noise impacts are more significant when construction occurs during noise-sensitive times of the day (early morning, evening, or nighttime hours near residential uses), the construction occurs in areas immediately adjoining noise sensitive land uses, or when construction lasts extended periods of time. Construction activities may result in annoyances to existing public and office uses adjacent to the project site. However, because the duration of construction would be temporary in nature (approximately 10 to 12 months), and no sensitive land uses have been identified within 1,000 feet of the site, the project would not result in significant short-term construction related noise impacts. In addition, the project will be required to comply with the applicable provisions of Chapter 9.10 of the City of Santa Clara Municipal Code.

#### **4.11.3      *Conclusion***

Implementation of the proposed project would not result in significant noise impacts. **[Less than Significant Impact]**



## 4.12 POPULATION AND HOUSING

### 4.12.1 Setting

The project proposes to develop a partially vacant site in the City of Santa Clara. According to the Association of Bay Area Government's *Projections 2007*, the City of Santa Clara had an estimated total of 104,920 jobs and 49,470 employed residents in 2005, resulting in a jobs/housing ratio of 2.12 jobs per employed resident.

### 4.12.2 Environmental Checklist and Discussion of Impacts

POPULATION AND HOUSING					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Induce substantial population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1,2
2) Displace substantial numbers of existing housing, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
3) Displace substantial numbers of people, necessitating the construction of replacement housing elsewhere?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

The project would develop a 2.28-acre, vacant site with a paved, surface, 221-space parking lot to be used for overflow parking for Our Lady of Peace Church adjacent to the site. The proposed project would not induce population growth in the City or alter the City's jobs/housing ratio and would therefore result in a less than significant population and housing impact. The project would not displace housing or residents.

### 4.12.3 Conclusion

The proposed project would not result in significant population or housing impacts. **[Less Than Significant Impact]**

## **4.13 PUBLIC SERVICES**

### **4.13.1 Setting**

#### **4.13.1.1 *Fire Service***

Fire protection services are provided by the City of Santa Clara Fire Department (SCFD). The SCFD is comprised of approximately 179 fire service personnel and 65 volunteers. The SCFD receives approximately 8,117 emergency calls per year, including hazardous materials, emergency medical, specialized rescue, and fires.<sup>12</sup> The goal of the SCFD is to maintain a force sufficiently staffed and deployed to sustain a three-minute response time to initial calls 90-95 percent of the time.<sup>13</sup>

The department consists of ten stations distributed throughout the City. The closest station to the project site is Station 1, located at 2400 Agnew Drive, which is approximately one mile southeast of the project site.

#### **4.13.1.2 *Police Service***

Police protection services are provided by the City of Santa Clara Police Department (SCPD). The SCPD has approximately 148 sworn officers, 48 civilian employees, and 32 reserves. Police headquarters are located at 601 El Camino Real, approximately 4.9 miles southwest of the project site.<sup>14</sup>

#### **4.13.1.3 *Parks and Schools***

The nearest public parks to the project site are Agnew Park, located at 2150 Agnew Road (approximately 1.25 miles east of the site), and Fuller Street Park, located at 61 Fuller Street (approximately 1.3 miles east of the site).

The nearest schools to the project site are Hughes Elementary School, located at 4949 Calle de Escuela (approximately 2.3 miles east of the site traveling by road), Cabrillo Middle School, located at 2550 Cabrillo Avenue (approximately 2.8 miles west of the site), and Wilcox High School, located at 3250 Monroe Street (approximately 3.0 miles west of the site).

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<sup>12</sup> City of Santa Clara, *Fire Department Fact Sheet- FY 2004/05*, <http://www.ci.santa-clara.ca.us/pdf/collateral/FactSheet-FireDept.pdf>, April 23, 2008.

<sup>13</sup> City of Santa Clara, *City of Santa Clara General Plan 2000-2010*, 2002.

<sup>14</sup> City of Santa Clara Police Department, [http://www.ci.santa-clara.ca.us/police/pol\\_index.html](http://www.ci.santa-clara.ca.us/police/pol_index.html), November 30, 2007.

#### 4.13.2

#### Environmental Checklist and Discussion of Impacts

PUBLIC SERVICES					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times or other performance objectives for any of the public services:					
Fire Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
Police Protection?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
Schools?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
Parks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
Other Public Facilities?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

##### 4.13.2.1

##### *Public Services Impacts*

The project is proposing the development of 2.28- vacant, undeveloped acres of a 5.78-acre site with a paved, 221-space surface parking lot. The proposed development on the site would be reviewed by the City of Santa Clara Police and Fire Departments before project approval. The proposed project will not increase need for police and fire services, and would not require the construction of new facilities or stations.

The proposed project would not generate population growth in the project area or result in the use of public park facilities in the City by new residents.

The proposed project would not generate new students. The project, therefore, would not result in an increase in school population or result in the need for new school facilities, or modification to school facilities, that could result in significant environmental impacts.

##### 4.13.3

##### Conclusion

The project would not result in significant impacts to public facilities. **[Less Than Significant Impact]**

#### 4.14 RECREATION

##### 4.14.1 Setting

The City of Santa Clara General Plan states that neighborhood parks and recreational centers are of great importance to the City. The City currently maintains 38 municipal parks and playgrounds, including a wildlife and natural vegetation park, and a skate park. Neighborhood parks typically range in size from one to 10 acres. The Department of Parks and Recreation also maintains a recreational program that supports a wide variety of activities including a Senior Citizens Center, a gymnastics center, nine neighborhood tennis centers, a Youth Activities Center, baseball fields, a football field, basketball courts, picnic facilities, and the International Swim Center. The City's recreational system is augmented by local school facilities, which are available to the general public.<sup>15</sup>

The nearest general use public park to the project site is Agnew Park, located approximately 1.25 miles east of the site.

##### 4.14.2 Environmental Checklist and Discussion of Impacts

RECREATION					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
2) Does the project include recreational facilities or require the construction or expansion of recreational facilities which might have an adverse physical effect on the environment?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

The proposed project will not increase usage of nearby parks and recreation facilities, and would not have an impact on these facilities such that adverse physical effects would result.

##### 4.14.3 Conclusion

The proposed project would not result in significant impacts to parks and recreational facilities.  
[Less Than Significant Impact]

<sup>15</sup> City of Santa Clara, *City of Santa Clara General Plan 200-2010*, 2002

## **4.15 TRANSPORTATION**

### **4.15.1 Setting**

#### **4.15.1.1 *Existing Roadway Network***

The project site can be accessed from Mission College Boulevard. Regional access is provided by US Highway 101 and Great America Parkway. Local access is provided by Mission College Boulevard and Our Lady's Way (refer to Figures 2 and 3).

#### **4.15.1.1 *Regional and Local Roadway Access***

#### **4.15.1.2 Existing Transit Service**

Transit service in the area includes local bus service provided by the Santa Clara Valley Transportation Authority (VTA).

#### **Bus Service**

Two local bus routes serve the project area. Route 57 provides service on weekdays and weekends between the West Valley Community College in San Jose and Old Ironsides VTA Light Rail Station in Santa Clara with 20 to 60 minute headways. Route 60 provides service on weekdays and weekends between Winchester Transit Center in San Jose and Old Ironsides VTA Light Rail Station in Santa Clara.

#### **Caltrain and ACE**

The Lawrence Caltrain station is located approximately 3.5 miles northwest of the project site, near Lawrence Expressway and Central Expressway. Caltrain commuter rail service between San Francisco to Gilroy stops at the Lawrence Caltrain Station. Caltrain provides service with 15- to 30-minute headways during commute hours.

#### **4.15.1.3 Existing Pedestrian and Bicycle Facilities**

Pedestrian facilities comprise sidewalks, crosswalks, and pedestrian signals. Sidewalks are provided on both sides of the roadways bordering the project site.

Bicycle facilities comprise paths (Class I), lanes (Class II), and routes (Class III). Bicycle paths are paved trails that are separate from roadways. Bicycle lanes are lanes on roadways designated for bicycle use by striping, pavement legends, and signs. Bicycle routes are roadways designated for bicycle use by signs only. There is a bike lane on Great America Parkway but there are no bicycle routes in the project vicinity.

#### 4.15.2

#### Environmental Checklist and Discussion of Impacts

TRANSPORTATION/TRAFFIC					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Cause an increase in traffic which is substantial in relation to the existing traffic load and capacity of the street system (i.e., result in a substantial increase in either the number of vehicle trips, the volume to capacity ratio of roads, or congestion at intersections)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
2) Exceed, either individually or cumulatively, a level of service standard established by the county congestion management agency for designated roads or highways?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1
3) Result in a change in air traffic patterns, including either an increase in traffic levels or a change in location that results in substantial safety risks?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
4) Substantially increase hazards due to a design feature (e.g., sharp curves or dangerous intersections) or incompatible land uses (e.g., farm equipment)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
5) Result in inadequate emergency access?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
6) Result in inadequate parking capacity?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
7) Conflict with adopted policies, plans, or programs supporting alternative transportation (e.g., bus turnouts, bicycle racks)?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

##### 4.15.2.1 *Overview*

Access to the site would be provided via one driveway onto Mission College Boulevard and one driveway proposed at the northern edge of the site, providing vehicular and pedestrian access to the proposed parking lot from the existing surface parking lot adjacent to the Our Lady of Peace Church (see Figure 3).

The proposed surface parking lot would provide 221 total parking spaces, 121 standard parking stalls and 100 compact parking stalls. The parking lot would be used for overflow parking during church services and events. The driveway on Mission College Boulevard would be gated with controlled access and would remain locked when the parking lot is not in use.

### **Traffic Impacts**

The proposed project would not generate any new trips to the site. For this reason, the proposed project is not anticipated to result in transportation level of service impacts to signalized intersections or freeway segments.

### **Transit Impacts**

The proposed project is a parking lot and would therefore not have any impact on transit facilities.

### **Impacts to Pedestrian or Bicycle Facilities**

The project would provide a sidewalk along the driveway linking the project site to the existing surface parking area adjacent to the Our Lady of Peace Church, east of the project site. Other than temporary impacts during construction, the project would not result in conflicts with pedestrian facilities in the area. The project would not impact bicycle facilities in the project vicinity.

### **Emergency Access**

Emergency access would be provided to the site via the two project driveways. The final site design is proposed to be consistent with regulatory requirements for fire truck access.

#### **4.15.3      Conclusion**

The proposed project would not result in significant transportation impacts. **[Less Than Significant Impact]**

## 4.16 UTILITIES AND SERVICE SYSTEMS

### 4.16.1 Setting

#### 4.16.1.1 *Water Service*

Water services to the site are provided by the City of Santa Clara Department of Water and Sewer Utilities. The Santa Clara Water Utility has a capacity of 80 million gallons per day (mgd) and produces an average of 24 mgd. The Water System consists of more than 330 miles of water mains, 27 wells and seven storage tanks with more than 27 million gallons of water capacity. Drinking water is provided by an extensive underground aquifer (access by the City's wells) and by two wholesale water importers: the Santa Clara Valley Water District (SCVWD) (imported from the Sacramento-San Joaquin Delta) and the San Francisco Hetch-Hetchy System (imported from the Sierra Nevada). About 35 percent of the City's water comes from these imported treated water supplies. The remaining 65 percent is pumped from the City's system of 27 deep wells. The three sources are used interchangeably or are blended together. A water recharge program administered by SCVWD from local reservoirs and imported water enhances the dependability of the underground aquifer.

The General Plan states that in 1988, the City used approximately 10 billion gallons of water for a population of 90,879. The current water demand (2007) is approximately 7.6 billion gallons per year<sup>16</sup> for an estimated population of 113,600.<sup>17</sup>

The South Bay Water Recycling Program was initiated to reduce the amount of effluent entering San Francisco Bay from the San José/Santa Clara Water Pollution Control Plant. The City of Santa Clara recycles approximately one percent of its water through non-potable uses by businesses, industries, parks, and schools along pipeline routes.

#### 4.16.1.2 *Wastewater*

Wastewater from the City of Santa Clara is treated at the San Jose/Santa Clara Water Pollution Control Plant, located near Alviso. The Water Pollution Control Plant (WPCP) is owned jointly by the two cities and is operated by the City of San José's Department of Environmental Services. The WPCP is one of the largest advanced wastewater treatment facilities in California and serves over 1,500,000 people in San José, Santa Clara, Milpitas, Campbell, Cupertino, Los Gatos, Saratoga, and Monte Sereno. The WPCP provides primary, secondary, and tertiary treatment of wastewater and has the capacity to treat 167 million gallons of wastewater a day (mgd).<sup>18</sup>

The WPCP is currently operating under a 120 million gallon per day dry weather effluent flow constraint. This requirement is based upon the State Water Resources Control Board and the Regional Water Quality Control Board concerns over the effects of additional freshwater discharges from the WPCP on the saltwater marsh habitat, and pollutant loading to the Bay from the WPCP. Approximately ten percent of the plant's effluent is recycled for non-potable uses and the remainder flows into San Francisco Bay.

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<sup>16</sup> City of Santa Clara Water Utility, Consumer Confidence Report 2007.

<sup>17</sup> Association of Bay Area Governments, Projections 2007. Note: this population estimate was calculated by averaging the 2005 and 2010 population numbers for the City of Santa Clara.

<sup>18</sup> City of San Jose website.



#### 4.16.1.3 *Storm Drainage*

The City of Santa Clara owns and maintains the municipal storm drainage system which serves the project site. The storm drain located in Mission College Boulevard, eventually flows to the Guadalupe River and the San Francisco Bay.

#### 4.16.1.3 *Solid Waste*

Solid waste collection in the City of Santa Clara is provided by Mission Trail Waste System through a contract with the City. The City has an arrangement with the owners of the Newby Island Landfill, located in San José, to provide disposal capacity for the City of Santa Clara through 2019. Recycling services are provided through Stevens Creek Disposal and Recycling. The City of Santa Clara is working to meet the waste diversion goal of 50 percent set by the state law for all jurisdictions to be met by 2000. According to the California Integrated Waste Management Board's website, preliminary information identified a diversion rate of between 41 and 45 percent for the City of Santa Clara.

#### 4.16.1.4 *Easement*

A 40-foot wide public utility easement is located through the center of the site (see Figure 3.1-1). This easement will be avoided for tree plantings and lighting improvements.

#### 4.16.2 Environmental Checklist and Discussion of Impacts

UTILITIES AND SERVICE SYSTEMS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
1) Exceed wastewater treatment requirements of the applicable Regional Water Quality Control Board?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
2) Require or result in the construction of new water or wastewater treatment facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
3) Require or result in the construction of new storm water drainage facilities or expansion of existing facilities, the construction of which could cause significant environmental effects?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
4) Have sufficient water supplies available to serve the project from existing entitlements and resources, or are new or expanded entitlements needed?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

UTILITIES AND SERVICE SYSTEMS					
	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
Would the project:					
5) Result in a determination by the wastewater treatment provider which serves or may serve the project that it has adequate capacity to serve the project's projected demand in addition to the provider's existing commitments?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
6) Be served by a landfill with sufficient permitted capacity to accommodate the project's solid waste disposal needs?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1
7) Comply with federal, state, and local statutes and regulations related to solid waste?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	1

#### 4.16.2.1 *Water Supply*

The proposed project would increase water demand incrementally on the site. Development of the project site with a parking lot would increase demand of water to maintain the landscaping on site. The City of Santa Clara will serve the site with potable water for irrigation, until such time as recycled water is available adjacent to the site. There is currently adequate supply in existing water mains located adjacent to the site in Mission College Boulevard.

#### 4.16.2.2 *Wastewater*

The WPCP has the capacity to treat 167 million gallons of wastewater a day. Currently, the WPCP is operating under a 120 million gallon per day dry weather effluent flow constraint. The proposed project will not produce wastewater.

#### 4.16.2.3 *Sanitary Sewer Infrastructure*

The project does not require sanitary sewer capacity or infrastructure.

#### 4.16.2.4 *Storm Drainage*

As discussed in *Section 4.8, Hydrology and Water Quality*, the proposed project would increase the percentage of impervious surfaces on site from the existing undeveloped, vacant condition, increasing overall stormwater flows. On-site drainage facilities would be designed to meet City of Santa Clara standards and would drain to the existing culvert in Great America Parkway. Implementation of C.3/post-construction measures (i.e., direction of runoff to vegetated swales) would reduce runoff from the site, and therefore, the project would not impact the City's storm water drainage system.

#### **4.16.2.5      *Solid Waste***

The proposed project would not result in an increase in waste sent to the landfills.

#### **4.16.2.6      *Natural Gas and Electricity Services***

Pacific Gas and Electric (PG&E) owns natural gas distribution facilities within the City of Santa Clara. The proposed project would not increase natural gas use.

#### **4.16.4      Conclusion**

The proposed project would not exceed the capacity of existing utilities and service systems. **[Less Than Significant Impact]**

## 4.17

## MANDATORY FINDINGS OF SIGNIFICANCE

	Potentially Significant Impact	Less Than Significant With Mitigation Incorporated	Less Than Significant Impact	No Impact	Information Source(s)
1) Does the project have the potential to degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, reduce the number or restrict the range of a rare or endangered plant or animal or eliminate important examples of the major periods of California history or prehistory?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	16-18
2) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects)?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1-52
3) Does the project have the potential to achieve short-term environmental goals to the disadvantage of long-term environmental goals?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1-52
4) Does the project have environmental effects which will cause substantial adverse effects on human beings, either directly or indirectly?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>	1-52

**Discussion:** With the implementation of the mitigation and avoidance measures included in the project and described in the specific sections of this report (refer to *Section 4. Environmental Setting, Checklist, and Discussion of Impacts*), on pages 7-59 of this Initial Study, the proposed project would not result in significant environmental impacts.

#### 4.17.1 Global Climate Change Impacts (Cumulative Impacts and Long-Term Environmental Goals)

Global climate change is the alteration of the Earth's weather including its temperature, precipitation, and wind patterns. Global temperatures are affected by naturally occurring and anthropogenic-generated atmospheric gases, such as carbon dioxide, methane, and nitrous oxide. These gases allow sunlight into the Earth's atmosphere, but prevent radiative heat from escaping into outer space, which is known as the "greenhouse" effect. The world's leading climate scientists have reached consensus that global climate change is underway and is very likely caused by humans.<sup>19</sup>

<sup>19</sup> IPCC, 2007: Summary for Policymakers. In: *Climate Change 2007: The Physical Science Basis. Contribution of Working Group I to the Fourth Assessment Report of the Intergovernmental Panel on Climate Change* [Solomon, S., D. Qin, M. Manning, Z. Chen, M. Marquis, K.B. Averyt, M. Tignor and H.L. Miller (eds.)]. Cambridge University Press, Cambridge, United Kingdom and New York, NY, USA. Available at: <http://www.ipcc.ch/>.

Agencies at the international, national, state, and local levels are considering strategies to control emissions of gases that contribute to global warming. There is no comprehensive strategy that is being implemented on a global scale that addresses climate change; however, in California, a multi-agency "Climate Action Team" has identified a range of strategies and the Air Resources Board, under Assembly Bill (AB) 32, has been designated to adopt the main plan for reducing California's GHG emissions by January 1, 2009, and various regulations and other initiatives for reducing GHG emissions by January 1, 2011. AB 32 requires achievement by 2020 of a statewide greenhouse gas emissions limit equivalent to 1990 emissions, and the adoption of rules and regulations to achieve the maximum technologically feasible and cost-effective greenhouse gas emissions reductions. By 2050, the state plans to reduce emissions to 80 percent below 1990 levels.

While the state of California has established programs to reduce greenhouse gas emissions, there are no established standards for gauging the significance of greenhouse gas emissions. Neither CEQA nor the CEQA Guidelines provide any methodology for analysis of greenhouse gases. Given the global scope of global climate change, the challenge under CEQA is for a Lead Agency to translate the issue down to the level of a CEQA document for a specific project in a way that is meaningful to the decision making process. Under CEQA, the essential questions are whether a project creates or contributes to an environmental impact or is subject to impacts from the environment in which it would occur, and what mitigation measures are available to avoid or reduce impacts.

#### **4.17.1.1      *Impacts From the Project***

Given the overwhelming scope of global climate change, it is not anticipated that a single development project would have an individually discernable effect on global climate change. It is more appropriate to conclude that the greenhouse gas emissions generated by the proposed project would combine with emissions across the state, nation, and globe to cumulatively contribute to global climate change.

The project is proposing paving 2.28-acres of the 5.785-acre project site for a 221-space surface parking lot. The project would temporarily increase greenhouse gas emissions from construction equipment operations and asphalt paving during the short term construction period, however, the project would not produce additional vehicle miles traveled and it is located within a developed urban area.

#### **4.17.1.2      *Impacts to the Project***

Impacts to the project from global climate change could include reduced water availability due to changes in the Sierra snowpack and/or droughts. Energy use could also rise as average temperatures rise. The project site is located less than five miles from San Francisco Bay and at elevations ranging from approximately 20 to 30 feet msl, is not within possible inundation areas from an up to three meter (approximately 10 feet) rise in sea level. The project will be designed for the use of recycled water for the landscaping, however the project is not currently planned for use of recycled water for landscaping. The project may be impacted by reduced potable water supplies, but since only a small portion of the site requires watering (ground covering and shrubs), the need for water is minimal.

#### **4.17.1.3      *Significance of Cumulative Global Climate Change Impacts***

Declaring an impact significant or not implies some knowledge of incremental effects that is several years away, at best. To determine whether the proposed project would have a significant impact on global climate change is speculative, because there are no existing numerical thresholds to determine

an impact. In an effort to disclose environmental impacts and to conform with the CEQA Guidelines [§16064(b)], it is the City's position that, based on the nature of this redevelopment project, its location within an established urban area served by existing infrastructure (rather than a greenfield site) and the measures included in the project to reduce energy use, the proposed project would not impede the state's ability to reach the emission reduction limits/standards set forth by the State of California by Executive Order S-3-05 and AB 32.

**Conclusion:** With the minimal energy and water needs, the project would not make a cumulatively considerable contribution to global climate change.

**[Less Than Significant Cumulative Impact]**

## Checklist Sources

1. CEQA Guidelines - Environmental Thresholds (Professional judgment and expertise and review of project plans).
2. City of Santa Clara, *City of Santa Clara General Plan 2000-2010*, 2002.
3. City of Santa Clara, *Municipal Code*.
4. California Department of Conservation, *Santa Clara County Important Farmland 2006*, Map. June 2005.
5. Bay Area Air Quality Management District, *CEQA Guidelines*, December 1999.
6. H.T. Harvey & Associates. *Our Lady of Peace Burrowing Owl Survey Report*. April 18, 2008.
7. Holman and Associates, *Archaeological Literature Review*, 2008.
8. County of Santa Clara Department of Public Works, *Soil Map Sheet 19*, 1964.
9. United States Department of Agriculture, Soil Conservation Service, *Soils of Santa Clara County*, 1968.
10. Cleary Consultants. *Geotechnical Investigation*. March 2008.
11. California Department of Conservation, *Geologic Map of the San Francisco-San José Quadrangle*, 1990.
13. Federal Emergency Management Agency, *Flood Insurance Rate Map, Community Panel No. 060350 0001C*, July 16, 1980.

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Association of Bay Area Governments, *Dam Failure Inundation Hazard Map for Morgan Hill*, 1995.  
<http://www.abag.ca.gov/cgi-bin/pickdamx.pl>

Association of Bay Area Governments, *Projections 2007*, December 2006.

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City of Santa Clara, *Municipal Code*.

City of Santa Clara Police Department, [http://www.ci.santa-clara.ca.us/police/pol\\_index.html](http://www.ci.santa-clara.ca.us/police/pol_index.html), November 30, 2007.

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United States Department of Agriculture, Soil Conservation Service, *Soils of Santa Clara County*, 1968.



## **SECTION 6      AUTHORS AND CONSULTANTS**

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Julie Moloney, Associate Planner

**Consultants:** **David J. Powers & Associates**  
Michelle Yesney, Principal  
Karli Grigsby, Assistant Project Manager  
Stephanie Francis, Graphic Artist

**Holman & Associates**  
Miley Holman, Archaeologist

# **APPENDIX A**

**Burrowing Owl Survey Report  
H.T. Harvey & Associates  
April 18, 2008**

**Burrowing Owl Monitoring  
H.T. Harvey & Associates  
February 12, 2008**



**H. T. HARVEY & ASSOCIATES**  
**ECOLOGICAL CONSULTANTS**

12 February 2008

Joe Mastroieni  
Our Lady of Peace  
2880 Mission College Blvd.  
Santa Clara, CA 95054

RE: Burrowing Owl Monitoring, Our Lady of Peach Church Parking Lot Project  
HTH# 2913-01

Dear Mr. Mastroieni:

Thank you for contacting H. T. Harvey & Associates regarding burrowing owl (*Athene cunicularia*) monitoring assistance during soil testing at the proposed parking lot site in the southern portion of the Our Lady of Peace Church property located at 2880 Mission College Boulevard, in Santa Clara, California. Per your request, H. T. Harvey & Associates ornithologist Robin Carle, M.S., served as a monitor during soil testing on the site during the morning of 8 February 2008. It is our understanding that the purpose of the monitoring was to insure no burrowing owls were harmed in the process of soil testing because burrowing owls were known to occur in the general vicinity within the last 10 years.

Robin surveyed the entire site prior to soil testing by walking the area and looking for small mammal burrows that provide roosting and nesting sites for burrowing owls. Robin looked for owls and evidence of owl occupation at burrows including feathers, whitewash, and regurgitated pellets. The site consists of ruderal, or disturbed grassland habitat with scattered small mammal burrows. Most California ground squirrel (*Spermophilus beecheyi*) burrows on the site appeared inactive based on the presence of debris or soil at the entrance and numerous burrows appear to have collapsed naturally without any reopening by active squirrels in the area. Robin did not observe any ground squirrel activity during her visit, nor did she observe owls or any evidence of owl occupation at any of the burrows on the site. Therefore, it is our opinion that the soil testing did not affect any burrowing owls or their burrows.

Please let us know if you have any questions about our monitoring assistance or this report. Thanks again for contacting H.T. Harvey & Associates.

Sincerely,

Kim Wells, Ph.D.  
Project Manager/Senior Wildlife Ecologist





**H. T. HARVEY & ASSOCIATES**  
**ECOLOGICAL CONSULTANTS**

April 18, 2008

Mr. Joe Mastroieni  
2880 Mission College Blvd.  
Santa Clara, CA 95054

RE: Our Lady of Peace Church Burrowing Owl Survey Report (HTH #2913-01)

Dear Mr. Mastroieni:

H. T. Harvey & Associates has conducted a protocol-level survey for burrowing owls (*Athene cunicularia*) on the 5-acre site of a proposed parking lot located at Our Lady of Peace Church in Santa Clara, California. This survey was conducted according to the California Department of Fish and Game's (CDFG's) protocol, during the primary portion of the breeding season (15 April-15 July), to determine whether owls are breeding on the site for purposes of environmental review and impact assessment.

H. T. Harvey & Associates ornithologist Robin Carle, M.S., had previously conducted a reconnaissance-level survey of this site for burrowing owls on 8 February 2008, very early in the breeding season. She observed no evidence of burrowing owl presence during that survey. She visited the site again, to initiate surveys during the primary part of the breeding season, on 14 April 2008. Robin walked the entire site and all areas within 250 feet of the site, as access allowed, looking for owls or evidence of recent owl occupation at burrows (i.e., presence of feathers, whitewash, or pellets). Although Robin observed no burrowing owls during this initial survey, she noted several burrows of California ground squirrels (*Spermophilus beecheyi*) on the project site and in the adjacent grass habitat between the project site and Highway 101. Because these burrows provided potential sites in which burrowing owls might roost or nest, and because site conditions in general were consistent with suitable burrowing owl habitat, we conducted three additional site visits on 15, 16, and 17 April according to the CDFG's protocol to determine whether owls were present on the site. No burrowing owls, nor evidence of burrowing owl presence, was detected on or within 250 feet of the site.

Because this survey was conducted during the primary portion of the breeding season and owls were determined to be absent, it is our opinion that the proposed project will not impact occupied burrowing owl breeding habitat. Please feel free to contact me at [srottenborn@harveyecology.com](mailto:srottenborn@harveyecology.com) or (408) 458-3205 if you have any questions regarding our survey. Thank you very much for contacting H.T. Harvey & Associates regarding this project.

Sincerely,

Stephen C. Rottenborn, Ph.D.  
Principal – Wildlife Ecologist





# **APPENDIX B**

**Geotechnical Investigation  
Cleary Consultants  
March 2008**

**GEOTECHNICAL INVESTIGATION  
NEW PARKING LOT  
OUR LADY OF PEACE CHURCH  
SANTA CLARA, CALIFORNIA**

**for**

**Mr. Joe Mastroieni, Facilities Manager  
Our Lady of Peace Church  
2800 Mission College Boulevard  
Santa Clara, CA 95054**

**by**

**Cleary Consultants, Inc.  
900 N. San Antonio Road  
Los Altos, California 94022**

**March 2008**



**CLEARY CONSULTANTS, INC.**

*Geotechnical Engineers and Geologists*

*J. Michael Cleary, CEG, GE  
Christophe A. Ciechanowski, GE  
Grant F. Foster, GE*

March 7, 2008  
Project No. 574.3  
Ser. 2113

Mr. Joe Mastroieni, Facilities Manager  
Our Lady of Peace Church  
2800 Mission College Boulevard  
Santa Clara, CA 95054

**RE: GEOTECHNICAL INVESTIGATION  
NEW PARKING LOT  
OUR LADY OF PEACE CHURCH  
SANTA CLARA, CALIFORNIA**


Dear Joe:

As requested, we have performed a geotechnical investigation for the planned new parking lot at Our Lady of Peace Church in Santa Clara, California. The accompanying report presents the results of our field investigation, laboratory testing and engineering analyses. The site and subsurface conditions are discussed and recommendations for the geotechnical engineering aspects of the parking lot improvements are presented. The recommendations presented in this report are contingent upon our review of the parking lot construction plans and observation/testing of the project earthwork and pavement installation.


Please refer to the text of the report for details of our findings and recommendations. If you have any questions concerning the report, please call.

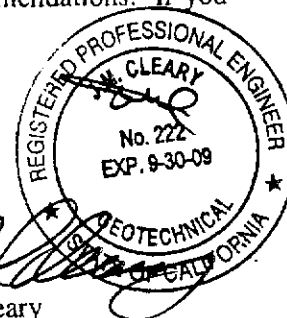
Yours very truly,

CLEARY CONSULTANTS, INC.

  
Grant Foster  
Geotechnical Engineer 2662  
GF/JMC:cm



  
J. Michael Cleary  
Geotechnical Engineer 222



Copies: Addressee (2)  
Steinberg Architects (3) Attn: Elizabeth Gibbons  
Ruth & Going, Inc. (1) Attn: Steve Sherman

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## **INTRODUCTION**

This report presents the results of our geotechnical investigation for the planned new parking lot at Our Lady of Peace Church in Santa Clara, California. The approximate location of the parking lot is shown on Drawing 1, Site Vicinity Map. The purpose of our investigation was to explore the soil and pavement subgrade conditions in the new parking lot area and develop findings and recommendations for the grading and new structural pavement sections, and the landscape retaining wall and light standard foundations.

As shown on the Conceptual Parking Plan prepared by Ruth and Going, Inc., dated January 28, 2008, the new parking lot will be located on the south portion of the church property in an open dirt area currently being used for overflow parking. The overflow parking lot will be accessed from Mission College Boulevard, and will provide approximately 215 automobile parking stalls.

We understand that the existing baserock drive that is currently being used to access the dirt lot will be paved and that a two to four foot high landscape retaining wall will be built along the east side of the drive (approximately 100 linear feet). New light standards, bioswales (for drainage), concrete flatwork and landscape areas are also anticipated for the planned parking lot improvements.

## **SCOPE**

As presented in our proposal letter dated January 31, 2008, the scope of services for this investigation has included:

1. Review of available published and unpublished geotechnical information for this area.

2. Subsurface exploration in the new parking lot area consisting of five exploratory borings.
3. Laboratory testing of samples obtained from the investigation.
4. Preparation of this geotechnical investigation report for the planned parking lot improvements presenting our findings and recommendations for site grading and drainage, curb and gutter installation, treatment of expansive soil, fill placement and subgrade preparation, light standard and landscape retaining wall foundations and new flexible pavement sections.

This report has been prepared for the specific use of Our Lady of Peace Church and their consultants in accordance with generally accepted soil and foundation engineering principles and practices. No other warranty, either expressed or implied, is made. In the event that any substantial changes in the design or nature of the project are planned, the conclusions and recommendations of this report shall not be considered valid unless such changes are reviewed and the conclusions of this report modified or verified in writing. Any use or reliance of this report or the information herein by a third party shall be at the party's sole risk.

It should also be recognized that changes in the site conditions may occur with the passage of time due to environmental processes or acts of man, and that changes in building codes, the state of the practice, or new information may require modifications in the recommendations presented herein. Accordingly, neither the client, nor any other party should rely on the information, conclusions or recommendations contained in this report after three years from its date of issuance without the express written consent of Cleary Consultants, Inc.

## **METHOD OF INVESTIGATION**

The subsurface investigation was performed on February 8, 2008, using a track-mounted hollow-stem auger drill rig. Five borings were drilled to a maximum depth of 10.0 feet at the locations shown on Drawing 2, Site Plan. Two shallow hand excavations were performed in the vicinity of the proposed landscape retaining wall to obtain small bag samples of the near-surface soils for classification. A key describing the soil classification system and soil consistency terms used in this report is presented on Drawing 3 and the soil sampling procedures are described in Drawing 4. Logs of the borings are presented on Drawings 6 through 10.

The borings were located in the field by pacing and interpolation of the features shown on the drawings provided us. These locations should be considered accurate only to the degree implied by the methods used.

Samples of the soil materials from the borings were returned to our laboratory for classification and testing. The results of moisture content, dry density, percent finer than No. 4 and 200 sieves, plasticity index, and free swell testing are shown on the boring logs. The laboratory test procedures followed during this investigation are summarized on Drawing 5. Drawing 11 presents additional information on the plasticity index testing. Drawing 12 presents the results of five percent Quicklime Plus, five percent Dolomitic Quicklime and five percent Hi-Cal Quicklime treated R-Value tests performed by Cooper Testing Laboratory on composite bulk samples of soils obtained from the exploratory borings.

## SITE CONDITIONS

### A. Surface

The new parking lot site is presently serving as a dirt "overflow parking" area. The lot is located on the south side of the church property. The site is relatively flat with about one foot of fall between the south and north ends, is covered with grass and weeds, and is bounded by Mission College Boulevard on the west and the Highway 101 on-ramp to the east and the south. The north side of the site is bordered by an approximately six acre, grass-covered park. A baserock-covered road currently provides access to the site from the existing asphalt-paved church parking lot to the north. A chainlink fence borders the south and east perimeters of the site.

As shown on the Site Plan, a 40 foot wide utility easement crosses the site in a north-south direction. We were not provided with documentation regarding the compaction of the trench backfill; and the ground surface along the alignment of the trench was observed to be depressed indicating some settlement of the backfill may have occurred.

The drainage conditions at the site are poor based on standing water observed during our site reconnaissance a few days after a period of rainfall.

### B. Subsurface

The exploratory borings drilled at the site encountered three to four feet of stiff silty clay over stiff sandy clay and medium dense clayey sand to the maximum depth explored of 10 feet. EB-5 encountered medium dense silty sand at a depth of nine and one-half feet.

The silty clay soils encountered in the upper three to four feet have a high to critical expansion potential based on their plasticity characteristics (plasticity indices = 21 to 37 percent) and the

free swell test data (free swells = 70 to 100 percent). The results of the plasticity index testing are shown on the boring logs and also on Drawing 11.

The near surface soils in the vicinity of the planned landscape retaining wall consist of highly expansive silty clay (CH), based on their plasticity characteristics (plasticity index = 29).

The attached boring logs and related information depict subsurface conditions only at the specific locations shown on Drawing 2 and on the particular date designated on the logs. Subsurface conditions at other locations may differ from conditions occurring at these boring locations. Also, the passage of time may result in a change in the subsurface conditions at these boring locations due to environmental changes.

### C. Groundwater

Free groundwater was not encountered in the borings during drilling. However, the borings were only open for a short period of time which may not have been sufficiently long enough to establish the stabilized water level. It should also be noted that fluctuations in the localized perched and regional groundwater levels can occur due to variations in rainfall, temperature, runoff, irrigation, and other factors not evident at the time our measurements were made and reported herein.

## CONCLUSIONS AND RECOMMENDATIONS

Based on the findings of our investigation, we conclude that the parking lot improvements can be constructed as planned provided the recommendations of this report are incorporated into the design and construction of the project. The silty clay subgrade soils at the site were found to be relatively weak, of variable consistency, and are highly to critically expansive. The subgrade

material classifies as (CH) type soil which is considered to be poorly rated for subgrade support of asphalt pavements. Therefore, we recommend that the upper 12 inches of subgrade material be chemically treated with five (5) percent Hi-Cal Quicklime to improve the strength and subgrade support characteristics of the soil prior to placing the new asphalt pavement section recommended below in this report. Lime-treatment should extend under new sidewalks and curb and gutter areas.

The grading for the project should have positive drainage of at least 1/2 percent across paved areas. Site drainage improvements should be evaluated and designed by the project civil engineer.

The landscape retaining wall can be supported on a conventional spread footing foundation bearing on a cushion of Class 2 aggregate baserock placed over the stiff native silty clay soil to minimize the effects of expansive soil movements. The light standards should be supported on drilled piers foundations.

We should observe the grading and pavement installation/reconstruction phases of the work as it is performed for any changes in anticipated conditions which could require modifications in our recommendations.

Detailed recommendations for use in design and construction of the project are presented in the remainder of this report. These recommendations are contingent upon our review of the earthwork and pavement installation plans for the project and our observation of the earthwork and pavement installation phases of the construction.

**A. Earthwork**

**1. Site Preparation**

New pavement, landscape retaining wall, curb and concrete flatwork areas should be cleared of all grass and organic materials. Any buried obstructions and existing tree roots in the new pavement or retaining wall areas should be removed to their full depth and extent and hauled from the site. Holes resulting from the removal of underground obstructions should be cleaned out and backfilled with suitable material compacted to the requirements for engineered fill given below.

The lateral extent of the undocumented trench backfill for the utility easement crossing the site (trench width) should be determined without disturbing the existing buried utility lines. We recommend that the upper three feet of the trench backfill be removed and replaced as properly engineered trench backfill compacted to the recommendations presented in Section A.4 Utility Trenches of this report. This work may be waived if compaction testing documentation can be provided for the previous installation of the underground utility.

**2. Recompaction and Lime-Treatment of Subgrade Soils**

After the site has been cleared and graded, and any underground obstructions removed and backfilled, the soils within the new parking lot improvement area and three feet beyond, should be chemically treated with five percent Hi-Cal Quicklime to depths of at least 12 inches below finished subgrade. Hi-Cal Quicklime is recommended based on the R-value test result of 78 achieved for the sample treated with this admixture as compared to the sample treated with Dolomitic Quicklime and Quicklime Plus which achieved R-Values of 69 and 59, respectively (Drawing 12, R-value Test Results). The higher R-Value test results for the Hi-Cal Quicklime treated sample indicates that the soil



reacts more effectively with the chemical achieving higher strength and improved pavement support qualities.

Relatively lightweight compaction and earth moving equipment should be utilized during initial grading to avoid overloading the underlying soils and to minimize any resultant pumping and loss of soil strength; once the subgrade has been chemically treated and stabilized, it is anticipated that the balance of the grading can be performed using conventional earth moving equipment including a large self-propelled compactor.

The performance of the lime-treated section is highly dependent on uniform mixing of the stabilization chemicals into the soil and proper curing of the treated soil. Hence, this work should be performed by a specialty subcontractor using appropriately sized additive spreading and mixing equipment which will result in a uniform five percent Hi-Cal Quicklime soil mixture throughout the upper 12 inches of the parking lot subgrade, respectively.

After satisfactory mixing of the soil has been achieved and the moisture content has been brought to optimum moisture for compaction, the chemically treated soil should be recompacted to at least 95 percent relative compaction as determined by the ASTM D1557 Test Procedure.

Field density tests should be performed by our representative in the chemically treated soil during the mixing and compaction process as a means of evaluating the contractor's compactive effort and compliance with the recommended minimum relative compaction.

Local unstable subgrade (pumping) areas that do not "heal up" after the lime-treatment phase of work, if encountered, can be additionally treated by overexcavation of 18 to 24 inches of the unstable soil, placement of stabilizing fabric, such as Mirafi 600X, and replacement with a layer of Class 2 aggregate baserock.

The subgrade should not be allowed to dry out below optimum moisture content prior to placing additional fill or non-expansive fill, as required. This is likely to require periodic sprinkling during the dry season. Should drying of the soils occur, they should again be scarified, moisture conditioned to proper moisture content and recompacted.

The on-site silty clay material should not be placed as fill over the lime-treated subgrade section, however, excess lime-treated soil may be used as fill in the parking lot area if necessary and as approved by our field representative prior to placement.

### **3. Fill Placement and Compaction**

Native subgrade soils having an organic content of less than three percent by volume can be used as fill. Fill material should not, however, contain rocks or lumps greater than four inches in greatest dimension with not more than 15 percent larger than 2.5 inches. Any required import fill should be predominantly granular with a plasticity index of 12 or less.

Engineered fill should be compacted to at least 90 percent relative compaction as determined by ASTM Test Designation D1557, except the upper six inches beneath new pavements should be at least 95 percent. Fill material should be spread and compacted in lifts not exceeding eight inches in uncompacted thickness. The moisture content of the on-site soils utilized as fill should be adjusted to about two percent above their laboratory established optimum moisture content.

### **4. Utility Trenches**

It is recommended that utility trenches placed within the new AC pavement areas be installed after the pavement subgrade has been rough graded and before the structural pavement section is placed. The available subsurface information indicates that utility

trenches can generally be excavated with conventional backhoe equipment. Any trenches deeper than five feet should be properly braced or sloped in accordance with the requirements of CAL-OSHA or the local governmental agency, whichever is more stringent.

Utility trenches should be backfilled with engineered fill placed in lifts not exceeding eight inches in uncompacted thickness, except thicker lifts may be used with the approval of the geotechnical engineer provided testing demonstrates that the required compaction can be readily achieved. In pavement areas, the upper three feet of trench backfill should be compacted to at least 90 percent relative compaction for backfill consisting of on-site soils, and 95 percent where imported, clean sand backfill is used. In addition, the upper six inches of all trench backfill under the new pavements should be compacted to at least 95 percent relative compaction.

Water jetting to achieve the required level of backfill compaction should not be permitted.

#### **5. Surface Drainage**

Positive surface gradients of at least two percent on porous surfaces and one percent on impervious surfaces should be provided adjacent to the new parking lot improvements so that surface water is directed away from curbs, sidewalks and foundations and towards suitable discharge facilities. The new parking lot should have positive drainage of at least 1/2 percent across paved areas. Ponding of surface water should not be allowed on the new asphalt pavement section.

## 6. Construction Observation

The grading operations should be observed and tested by our representative for conformance with the project plans, specifications and our recommendations. This work includes the site preparation, selection of satisfactory fill materials, and lime-treatment, placement and compaction of the subgrade soil, engineered fill and baserock materials. Sufficient notification prior to commencement of the earthwork is essential to make certain that the work will be properly observed and tested.

### B. New Flexible Pavements

The new pavements for the project should be designed for the anticipated traffic loadings. Using the laboratory determined R-value of eight for the silty clay subgrade soils encountered in the parking lot area and a design R-Value of 70 for subgrade soils treated with 5 percent Hi-Cal Quicklime, assumed Traffic Indices of 4.5 and 6.0 for auto parking and driveways/firelanes, respectively, and the flexible pavement design procedure from the CALTRANS Highway Design Manual (Section 7-651.2), we have calculated the following flexible pavement sections:

**TABLE 1 - Recommended Flexible Pavement Sections**

Traffic Condition	Asphalt Concrete (inches)	Class 2 Aggregate Base (inches)	Lime-Treated Subgrade (inches)	Total Thickness (inches)
Auto Parking (T.I. = 4.5)	2.5	6.0	12.0	20.5
Driveways/Firelanes (T.I. = 6.0)	3.0	8.0	12.0	23.0

Since the use of lime will result in a stronger subgrade than the non-treated subgrade at the same relative compaction, the required section of Class 2 aggregate base has been significantly

reduced. The performance of the treated section is highly dependent on uniform mixing of the lime into the soil and proper curing of the treated soil. Hence, this work should be performed by a specialty subcontractor using appropriately sized additive spreading and mixing equipment which will result in a uniform five percent Hi-Cal Quicklime soil mixture throughout the upper 12 inches of the subgrade.

After satisfactory mixing of the soil has been achieved and the moisture content has been brought to optimum moisture for compaction, the 12-inch section of lime treated soil should be recompacted to at least 90 percent relative compaction as determined by the ASTM D1557 Test Procedure. However, the upper six inches of the lime-treated soil should be compacted to at least 95 percent relative compaction. Compaction should be performed using heavy compaction equipment such as a self-propelled "Bigfoot" sheepsfoot roller or segmented wheeled compactor.

Field density tests should be performed by our representative in the lime-treated soil during the mixing and compaction process as a means of evaluating the contractor's compactive effort and compliance with the recommended minimum relative compaction. Field R-Value, plasticity index and free swell testing should be determined on samples of the treated soil upon completion to verify that the materials have achieved the required strength and reduction in their expansion potential.

The subgrade should be statically rolled with a heavy, smooth drum roller to provide a smooth firm surface. Local unstable subgrade (pumping) areas that do not "heal up" after the lime-treatment phase of work, if encountered, can be additionally treated by overexcavation of 18 to 24 inches of the unstable soil, placement of stabilizing fabric, such as Mirafi 600X, and replacement with a layer of Class 2 aggregate baserock. The method and extent of any additional required stabilization work should be evaluated by our representative.

Class 2 aggregate base should have an R-Value of at least 78 and conform to the requirements of Section 26-1.02A in the State of California, CALTRANS Standard Specifications, latest edition.

The aggregate base material should be placed in thin lifts in a manner to prevent segregation. The aggregate base should also be uniformly moisture conditioned and compacted to at least 95 percent relative compaction to provide a smooth, unyielding surface.

The asphaltic concrete should conform to and be placed in accordance with the requirements of Section 39 in the State of California CALTRANS Standard Specifications, latest edition.

Concrete curbs should be embedded at least two inches below the soil subgrade (below the bottom of the aggregate base section) in any areas where irrigated landscape areas are planned adjacent to AC pavements.

C. **Slabs-On-Grade and Curbs**

Concrete sidewalks, perimeter edging, and curbs should be supported on at least 12 inches of Class 2 aggregate baserock in untreated subgrade areas, and four inches of Class 2 aggregate baserock in lime-treated subgrade areas, compacted to at least 90 percent relative compaction.

Reinforcement of slabs should be provided in accordance with their anticipated use and loading, but as a minimum, slabs should be reinforced with No. 3 bars at 18 inches on center or No. 4 bars at 24 inches on center, both ways.

Prior to final construction of slabs, the subgrade surface should be proofrolled to provide smooth, firm slab support.

#### **D.     Landscape Retaining Walls**

Landscape retaining walls required for the project can be supported on spread footing foundations designed to resist lateral earth pressures and any additional lateral loads caused by surcharge loading. Footings should have a minimum width of 18 inches, be founded at least 18 inches below lowest adjacent finished grade, and embedded at least 12 inches into the supporting subgrade soil. Expansive silty clay soil in the bottom of the footing should be overexcavated 12 inches and replaced with Class 2 aggregate baserock compacted to at least 90 percent relative compaction. Footings located adjacent to utility trenches should have their bearing surfaces below an imaginary 1.5:1 (horizontal to vertical) plane projected upward from the edge of the bottom of the trench. Care should be taken to keep the footings moist by spraying lightly prior to the concrete pour.

At the above depths, footings bearing on a cushion of Class 2 aggregate baserock over native undisturbed silty clay subgrade can be designed for an allowable bearing pressure of 1200 psf due to dead loads with a 50 percent increase for total design loads (1800 psf) including wind and seismic. All continuous footings should be provided with at least two number four reinforcement bars top and bottom, to provide structural continuity and to permit spanning of local irregularities.

Lateral loads may be resisted by friction between the foundation bottoms and the supporting Class 2 aggregate baserock. A friction coefficient of 0.35 is considered applicable. As an alternative, an equivalent fluid pressure of 250 pcf starting one-half foot below the ground surface can be taken against the sides of footings poured neat.

We recommend that unrestrained walls with level or gently sloping backfill conditions up to 3:1 (horizontal to vertical) be designed to resist an equivalent fluid pressure of 55 pcf and that restrained walls be designed to resist an equivalent fluid pressure of 55 pcf plus an additional uniform lateral pressure of ten H psf where H = height of backfill above wall foundation in feet.

**GEOTECHNICAL INVESTIGATION  
NEW PARKING LOT  
OUR LADY OF PEACE CHURCH  
SANTA CLARA, CALIFORNIA**

**for**

**Mr. Joe Mastroieni, Facilities Manager  
Our Lady of Peace Church  
2800 Mission College Boulevard  
Santa Clara, CA 95054**

**by**

**Cleary Consultants, Inc.  
900 N. San Antonio Road  
Los Altos, California 94022**

**March 2008**





**CLEARY CONSULTANTS, INC.**

*Geotechnical Engineers and Geologists*

*J. Michael Cleary, CEG, GE  
Christophe A. Ciechanowski, GE  
Grant F. Foster, GE*

March 7, 2008  
Project No. 574.3  
Ser. 2113

Mr. Joe Mastroieni, Facilities Manager  
Our Lady of Peace Church  
2800 Mission College Boulevard  
Santa Clara, CA 95054

**RE: GEOTECHNICAL INVESTIGATION  
NEW PARKING LOT  
OUR LADY OF PEACE CHURCH  
SANTA CLARA, CALIFORNIA**

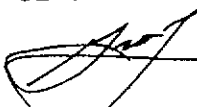
Dear Joe:

As requested, we have performed a geotechnical investigation for the planned new parking lot at Our Lady of Peace Church in Santa Clara, California. The accompanying report presents the results of our field investigation, laboratory testing and engineering analyses. The site and subsurface conditions are discussed and recommendations for the geotechnical engineering aspects of the parking lot improvements are presented. The recommendations presented in this report are contingent upon our review of the parking lot construction plans and observation/testing of the project earthwork and pavement installation.


Please refer to the text of the report for details of our findings and recommendations. If you have any questions concerning the report, please call.

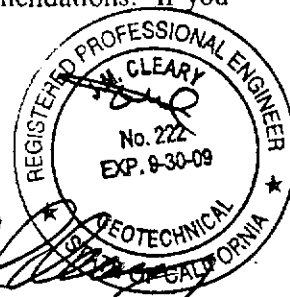
Yours very truly,

CLEARY CONSULTANTS, INC.

  
Grant Foster  
Geotechnical Engineer 2662  
GF/JMC:cm



  
J. Michael Cleary  
Geotechnical Engineer 222



Copies: Addressee (2)  
Steinberg Architects (3) Attn: Elizabeth Gibbons  
Ruth & Going, Inc. (1) Attn: Steve Sherman

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## **INTRODUCTION**

This report presents the results of our geotechnical investigation for the planned new parking lot at Our Lady of Peace Church in Santa Clara, California. The approximate location of the parking lot is shown on Drawing 1, Site Vicinity Map. The purpose of our investigation was to explore the soil and pavement subgrade conditions in the new parking lot area and develop findings and recommendations for the grading and new structural pavement sections, and the landscape retaining wall and light standard foundations.

As shown on the Conceptual Parking Plan prepared by Ruth and Going, Inc., dated January 28, 2008, the new parking lot will be located on the south portion of the church property in an open dirt area currently being used for overflow parking. The overflow parking lot will be accessed from Mission College Boulevard, and will provide approximately 215 automobile parking stalls.

We understand that the existing baserock drive that is currently being used to access the dirt lot will be paved and that a two to four foot high landscape retaining wall will be built along the east side of the drive (approximately 100 linear feet). New light standards, bioswales (for drainage), concrete flatwork and landscape areas are also anticipated for the planned parking lot improvements.

## **SCOPE**

As presented in our proposal letter dated January 31, 2008, the scope of services for this investigation has included:

1. Review of available published and unpublished geotechnical information for this area.

2. Subsurface exploration in the new parking lot area consisting of five exploratory borings.
3. Laboratory testing of samples obtained from the investigation.
4. Preparation of this geotechnical investigation report for the planned parking lot improvements presenting our findings and recommendations for site grading and drainage, curb and gutter installation, treatment of expansive soil, fill placement and subgrade preparation, light standard and landscape retaining wall foundations and new flexible pavement sections.

This report has been prepared for the specific use of Our Lady of Peace Church and their consultants in accordance with generally accepted soil and foundation engineering principles and practices. No other warranty, either expressed or implied, is made. In the event that any substantial changes in the design or nature of the project are planned, the conclusions and recommendations of this report shall not be considered valid unless such changes are reviewed and the conclusions of this report modified or verified in writing. Any use or reliance of this report or the information herein by a third party shall be at the party's sole risk.

It should also be recognized that changes in the site conditions may occur with the passage of time due to environmental processes or acts of man, and that changes in building codes, the state of the practice, or new information may require modifications in the recommendations presented herein. Accordingly, neither the client, nor any other party should rely on the information, conclusions or recommendations contained in this report after three years from its date of issuance without the express written consent of Cleary Consultants, Inc.

## **METHOD OF INVESTIGATION**

The subsurface investigation was performed on February 8, 2008, using a track-mounted hollow-stem auger drill rig. Five borings were drilled to a maximum depth of 10.0 feet at the locations shown on Drawing 2, Site Plan. Two shallow hand excavations were performed in the vicinity of the proposed landscape retaining wall to obtain small bag samples of the near-surface soils for classification. A key describing the soil classification system and soil consistency terms used in this report is presented on Drawing 3 and the soil sampling procedures are described in Drawing 4. Logs of the borings are presented on Drawings 6 through 10.

The borings were located in the field by pacing and interpolation of the features shown on the drawings provided us. These locations should be considered accurate only to the degree implied by the methods used.

Samples of the soil materials from the borings were returned to our laboratory for classification and testing. The results of moisture content, dry density, percent finer than No. 4 and 200 sieves, plasticity index, and free swell testing are shown on the boring logs. The laboratory test procedures followed during this investigation are summarized on Drawing 5. Drawing 11 presents additional information on the plasticity index testing. Drawing 12 presents the results of five percent Quicklime Plus, five percent Dolomitic Quicklime and five percent Hi-Cal Quicklime treated R-Value tests performed by Cooper Testing Laboratory on composite bulk samples of soils obtained from the exploratory borings.

## **SITE CONDITIONS**

### **A. Surface**

The new parking lot site is presently serving as a dirt "overflow parking" area. The lot is located on the south side of the church property. The site is relatively flat with about one foot of fall between the south and north ends, is covered with grass and weeds, and is bounded by Mission College Boulevard on the west and the Highway 101 on-ramp to the east and the south. The north side of the site is bordered by an approximately six acre, grass-covered park. A baserock-covered road currently provides access to the site from the existing asphalt-paved church parking lot to the north. A chainlink fence borders the south and east perimeters of the site.

As shown on the Site Plan, a 40 foot wide utility easement crosses the site in a north-south direction. We were not provided with documentation regarding the compaction of the trench backfill; and the ground surface along the alignment of the trench was observed to be depressed indicating some settlement of the backfill may have occurred.

The drainage conditions at the site are poor based on standing water observed during our site reconnaissance a few days after a period of rainfall.

### **B. Subsurface**

The exploratory borings drilled at the site encountered three to four feet of stiff silty clay over stiff sandy clay and medium dense clayey sand to the maximum depth explored of 10 feet. EB-5 encountered medium dense silty sand at a depth of nine and one-half feet.

The silty clay soils encountered in the upper three to four feet have a high to critical expansion potential based on their plasticity characteristics (plasticity indices = 21 to 37 percent) and the

free swell test data (free swells = 70 to 100 percent). The results of the plasticity index testing are shown on the boring logs and also on Drawing 11.

The near surface soils in the vicinity of the planned landscape retaining wall consist of highly expansive silty clay (CH), based on their plasticity characteristics (plasticity index = 29).

The attached boring logs and related information depict subsurface conditions only at the specific locations shown on Drawing 2 and on the particular date designated on the logs. Subsurface conditions at other locations may differ from conditions occurring at these boring locations. Also, the passage of time may result in a change in the subsurface conditions at these boring locations due to environmental changes.

#### **C. Groundwater**

Free groundwater was not encountered in the borings during drilling. However, the borings were only open for a short period of time which may not have been sufficiently long enough to establish the stabilized water level. It should also be noted that fluctuations in the localized perched and regional groundwater levels can occur due to variations in rainfall, temperature, runoff, irrigation, and other factors not evident at the time our measurements were made and reported herein.

### **CONCLUSIONS AND RECOMMENDATIONS**

Based on the findings of our investigation, we conclude that the parking lot improvements can be constructed as planned provided the recommendations of this report are incorporated into the design and construction of the project. The silty clay subgrade soils at the site were found to be relatively weak, of variable consistency, and are highly to critically expansive. The subgrade



material classifies as (CH) type soil which is considered to be poorly rated for subgrade support of asphalt pavements. Therefore, we recommend that the upper 12 inches of subgrade material be chemically treated with five (5) percent Hi-Cal Quicklime to improve the strength and subgrade support characteristics of the soil prior to placing the new asphalt pavement section recommended below in this report. Lime-treatment should extend under new sidewalks and curb and gutter areas.

The grading for the project should have positive drainage of at least 1/2 percent across paved areas. Site drainage improvements should be evaluated and designed by the project civil engineer.

The landscape retaining wall can be supported on a conventional spread footing foundation bearing on a cushion of Class 2 aggregate baserock placed over the stiff native silty clay soil to minimize the effects of expansive soil movements. The light standards should be supported on drilled piers foundations.

We should observe the grading and pavement installation/reconstruction phases of the work as it is performed for any changes in anticipated conditions which could require modifications in our recommendations.

Detailed recommendations for use in design and construction of the project are presented in the remainder of this report. These recommendations are contingent upon our review of the earthwork and pavement installation plans for the project and our observation of the earthwork and pavement installation phases of the construction.

**A. Earthwork**

**1. Site Preparation**

New pavement, landscape retaining wall, curb and concrete flatwork areas should be cleared of all grass and organic materials. Any buried obstructions and existing tree roots in the new pavement or retaining wall areas should be removed to their full depth and extent and hauled from the site. Holes resulting from the removal of underground obstructions should be cleaned out and backfilled with suitable material compacted to the requirements for engineered fill given below.

The lateral extent of the undocumented trench backfill for the utility easement crossing the site (trench width) should be determined without disturbing the existing buried utility lines. We recommend that the upper three feet of the trench backfill be removed and replaced as properly engineered trench backfill compacted to the recommendations presented in Section A.4 Utility Trenches of this report. This work may be waived if compaction testing documentation can be provided for the previous installation of the underground utility.

**2. Recompaction and Lime-Treatment of Subgrade Soils**

After the site has been cleared and graded, and any underground obstructions removed and backfilled, the soils within the new parking lot improvement area and three feet beyond, should be chemically treated with five percent Hi-Cal Quicklime to depths of at least 12 inches below finished subgrade. Hi-Cal Quicklime is recommended based on the R-value test result of 78 achieved for the sample treated with this admixture as compared to the sample treated with Dolomitic Quicklime and Quicklime Plus which achieved R-Values of 69 and 59, respectively (Drawing 12, R-value Test Results). The higher R-Value test results for the Hi-Cal Quicklime treated sample indicates that the soil

reacts more effectively with the chemical achieving higher strength and improved pavement support qualities.

Relatively lightweight compaction and earth moving equipment should be utilized during initial grading to avoid overloading the underlying soils and to minimize any resultant pumping and loss of soil strength; once the subgrade has been chemically treated and stabilized, it is anticipated that the balance of the grading can be performed using conventional earth moving equipment including a large self-propelled compactor.

The performance of the lime-treated section is highly dependent on uniform mixing of the stabilization chemicals into the soil and proper curing of the treated soil. Hence, this work should be performed by a specialty subcontractor using appropriately sized additive spreading and mixing equipment which will result in a uniform five percent Hi-Cal Quicklime soil mixture throughout the upper 12 inches of the parking lot subgrade, respectively.

After satisfactory mixing of the soil has been achieved and the moisture content has been brought to optimum moisture for compaction, the chemically treated soil should be recompacted to at least 95 percent relative compaction as determined by the ASTM D1557 Test Procedure.

Field density tests should be performed by our representative in the chemically treated soil during the mixing and compaction process as a means of evaluating the contractor's compactive effort and compliance with the recommended minimum relative compaction.

Local unstable subgrade (pumping) areas that do not "heal up" after the lime-treatment phase of work, if encountered, can be additionally treated by overexcavation of 18 to 24 inches of the unstable soil, placement of stabilizing fabric, such as Mirafi 600X, and replacement with a layer of Class 2 aggregate baserock.

The subgrade should not be allowed to dry out below optimum moisture content prior to placing additional fill or non-expansive fill, as required. This is likely to require periodic sprinkling during the dry season. Should drying of the soils occur, they should again be scarified, moisture conditioned to proper moisture content and recompacted.

The on-site silty clay material should not be placed as fill over the lime-treated subgrade section, however, excess lime-treated soil may be used as fill in the parking lot area if necessary and as approved by our field representative prior to placement.

### **3. Fill Placement and Compaction**

Native subgrade soils having an organic content of less than three percent by volume can be used as fill. Fill material should not, however, contain rocks or lumps greater than four inches in greatest dimension with not more than 15 percent larger than 2.5 inches. Any required import fill should be predominantly granular with a plasticity index of 12 or less.

Engineered fill should be compacted to at least 90 percent relative compaction as determined by ASTM Test Designation D1557, except the upper six inches beneath new pavements should be at least 95 percent. Fill material should be spread and compacted in lifts not exceeding eight inches in uncompacted thickness. The moisture content of the on-site soils utilized as fill should be adjusted to about two percent above their laboratory established optimum moisture content.

### **4. Utility Trenches**

It is recommended that utility trenches placed within the new AC pavement areas be installed after the pavement subgrade has been rough graded and before the structural pavement section is placed. The available subsurface information indicates that utility

trenches can generally be excavated with conventional backhoe equipment. Any trenches deeper than five feet should be properly braced or sloped in accordance with the requirements of CAL-OSHA or the local governmental agency, whichever is more stringent.

Utility trenches should be backfilled with engineered fill placed in lifts not exceeding eight inches in uncompacted thickness, except thicker lifts may be used with the approval of the geotechnical engineer provided testing demonstrates that the required compaction can be readily achieved. In pavement areas, the upper three feet of trench backfill should be compacted to at least 90 percent relative compaction for backfill consisting of on-site soils, and 95 percent where imported, clean sand backfill is used. In addition, the upper six inches of all trench backfill under the new pavements should be compacted to at least 95 percent relative compaction.

Water jetting to achieve the required level of backfill compaction should not be permitted.

## **5. Surface Drainage**

Positive surface gradients of at least two percent on porous surfaces and one percent on impervious surfaces should be provided adjacent to the new parking lot improvements so that surface water is directed away from curbs, sidewalks and foundations and towards suitable discharge facilities. The new parking lot should have positive drainage of at least 1/2 percent across paved areas. Ponding of surface water should not be allowed on the new asphalt pavement section.

## 6. Construction Observation

The grading operations should be observed and tested by our representative for conformance with the project plans, specifications and our recommendations. This work includes the site preparation, selection of satisfactory fill materials, and lime-treatment, placement and compaction of the subgrade soil, engineered fill and baserock materials. Sufficient notification prior to commencement of the earthwork is essential to make certain that the work will be properly observed and tested.

### B. New Flexible Pavements

The new pavements for the project should be designed for the anticipated traffic loadings. Using the laboratory determined R-value of eight for the silty clay subgrade soils encountered in the parking lot area and a design R-Value of 70 for subgrade soils treated with 5 percent Hi-Cal Quicklime, assumed Traffic Indices of 4.5 and 6.0 for auto parking and driveways/firelanes, respectively, and the flexible pavement design procedure from the CALTRANS Highway Design Manual (Section 7-651.2), we have calculated the following flexible pavement sections:

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reduced. The performance of the treated section is highly dependent on uniform mixing of the lime into the soil and proper curing of the treated soil. Hence, this work should be performed by a specialty subcontractor using appropriately sized additive spreading and mixing equipment which will result in a uniform five percent Hi-Cal Quicklime soil mixture throughout the upper 12 inches of the subgrade.

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Field density tests should be performed by our representative in the lime-treated soil during the mixing and compaction process as a means of evaluating the contractor's compactive effort and compliance with the recommended minimum relative compaction. Field R-Value, plasticity index and free swell testing should be determined on samples of the treated soil upon completion to verify that the materials have achieved the required strength and reduction in their expansion potential.

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The aggregate base material should be placed in thin lifts in a manner to prevent segregation. The aggregate base should also be uniformly moisture conditioned and compacted to at least 95 percent relative compaction to provide a smooth, unyielding surface.

The asphaltic concrete should conform to and be placed in accordance with the requirements of Section 39 in the State of California CALTRANS Standard Specifications, latest edition.

Concrete curbs should be embedded at least two inches below the soil subgrade (below the bottom of the aggregate base section) in any areas where irrigated landscape areas are planned adjacent to AC pavements.

**C.     Slabs-On-Grade and Curbs**

Concrete sidewalks, perimeter edging, and curbs should be supported on at least 12 inches of Class 2 aggregate baserock in untreated subgrade areas, and four inches of Class 2 aggregate baserock in lime-treated subgrade areas, compacted to at least 90 percent relative compaction.

Reinforcement of slabs should be provided in accordance with their anticipated use and loading, but as a minimum, slabs should be reinforced with No. 3 bars at 18 inches on center or No. 4 bars at 24 inches on center, both ways.

Prior to final construction of slabs, the subgrade surface should be proofrolled to provide smooth, firm slab support.



#### **D.     Landscape Retaining Walls**

Landscape retaining walls required for the project can be supported on spread footing foundations designed to resist lateral earth pressures and any additional lateral loads caused by surcharge loading. Footings should have a minimum width of 18 inches, be founded at least 18 inches below lowest adjacent finished grade, and embedded at least 12 inches into the supporting subgrade soil. Expansive silty clay soil in the bottom of the footing should be overexcavated 12 inches and replaced with Class 2 aggregate baserock compacted to at least 90 percent relative compaction. Footings located adjacent to utility trenches should have their bearing surfaces below an imaginary 1.5:1 (horizontal to vertical) plane projected upward from the edge of the bottom of the trench. Care should be taken to keep the footings moist by spraying lightly prior to the concrete pour.

At the above depths, footings bearing on a cushion of Class 2 aggregate baserock over native undisturbed silty clay subgrade can be designed for an allowable bearing pressure of 1200 psf due to dead loads with a 50 percent increase for total design loads (1800 psf) including wind and seismic. All continuous footings should be provided with at least two number four reinforcement bars top and bottom, to provide structural continuity and to permit spanning of local irregularities.

Lateral loads may be resisted by friction between the foundation bottoms and the supporting Class 2 aggregate baserock. A friction coefficient of 0.35 is considered applicable. As an alternative, an equivalent fluid pressure of 250 pcf starting one-half foot below the ground surface can be taken against the sides of footings poured neat.

We recommend that unrestrained walls with level or gently sloping backfill conditions up to 3:1 (horizontal to vertical) be designed to resist an equivalent fluid pressure of 55 pcf and that restrained walls be designed to resist an equivalent fluid pressure of 55 pcf plus an additional uniform lateral pressure of ten H psf where H = height of backfill above wall foundation in feet.

Wherever walls will be subjected to surcharge loads, they should be designed for an additional lateral pressure equal to one-third or one-half the anticipated surcharge load depending on whether the wall is unrestrained or restrained, respectively.

The preceding pressures assume that sufficient drainage is provided behind the retaining walls to prevent the build-up of hydrostatic pressures from surface or subsurface water infiltration. Adequate drainage may be provided by means of clean, 3/4 inch drain rock material enclosed in a filter fabric, such as Mirafi 140, and a four-inch diameter perforated pipe (Schedule 40 or stronger) placed at the base of the wall. The perforated pipe should be tied into a closed pipe and carried to a suitable drainage system.

Backfill material placed behind retaining walls should be non-expansive and compacted to at least 90 percent relative compaction using lightweight compaction equipment. If heavy compaction equipment is used, the walls should be appropriately braced during the backfilling. A 12-inch cap of impervious native clay soil should be placed over the top of the retaining wall backfill to minimize surface water infiltration.

#### **E. Light Standard Foundations**

New light standards should be supported on drilled pier foundations consisting of cast-in-place, straight shaft friction piers. The piers should extend to a minimum depth of eight feet below any new or existing fills into undisturbed native soils. The drilled piers should have a minimum diameter of 24 inches.

The drilled piers can be designed on the basis of 350 psf skin friction for vertical loads with a 50 percent increase for wind and seismic conditions. Point bearing resistance should be neglected. For resistance to lateral loads, an equivalent fluid pressure of 250 pcf up to a maximum of 1500 psf can be assumed to act over 1.5 times the projected area of the individual pier shaft. The skin

friction and passive pressures may be assumed to start 12 inches below the ground surface, below any fills, and below a 1.5:1 influence zone projecting up from any adjacent excavations (such as utility trenches).

The bottom of the pier excavations should be dry and relatively free of loose soil or fall-in prior to installing reinforcing steel and placing concrete. Since the actual lengths of the piers may depend on the subsurface conditions encountered in the field, the excavation of the piers should be performed under the observation of our representative.

If caving conditions are encountered, it may be necessary to place rebar in the pier excavations and backfill them with concrete immediately after drilling or case/sleeve the pier holes during drilling, and remove the casing during the concrete pour.

Reinforcement of the piers should be provided for their full length in accordance with the structural designer's analysis.

Settlements of the pier foundations under design loads are expected to be within tolerable limits for the proposed construction.

#### **PLAN REVIEW AND CONSTRUCTION OBSERVATION**

We should review the grading and parking lot improvement plans and specifications for the project when they are available. We should also be retained to provide soil engineering observation and testing services during the grading, foundation and pavement installation phases of the project. This will provide the opportunity for correlation of the soil conditions found in our investigation with those actually encountered in the field, and thus permit any necessary modifications in our recommendations resulting from changes in anticipated conditions.

### **LIST OF REFERENCES**

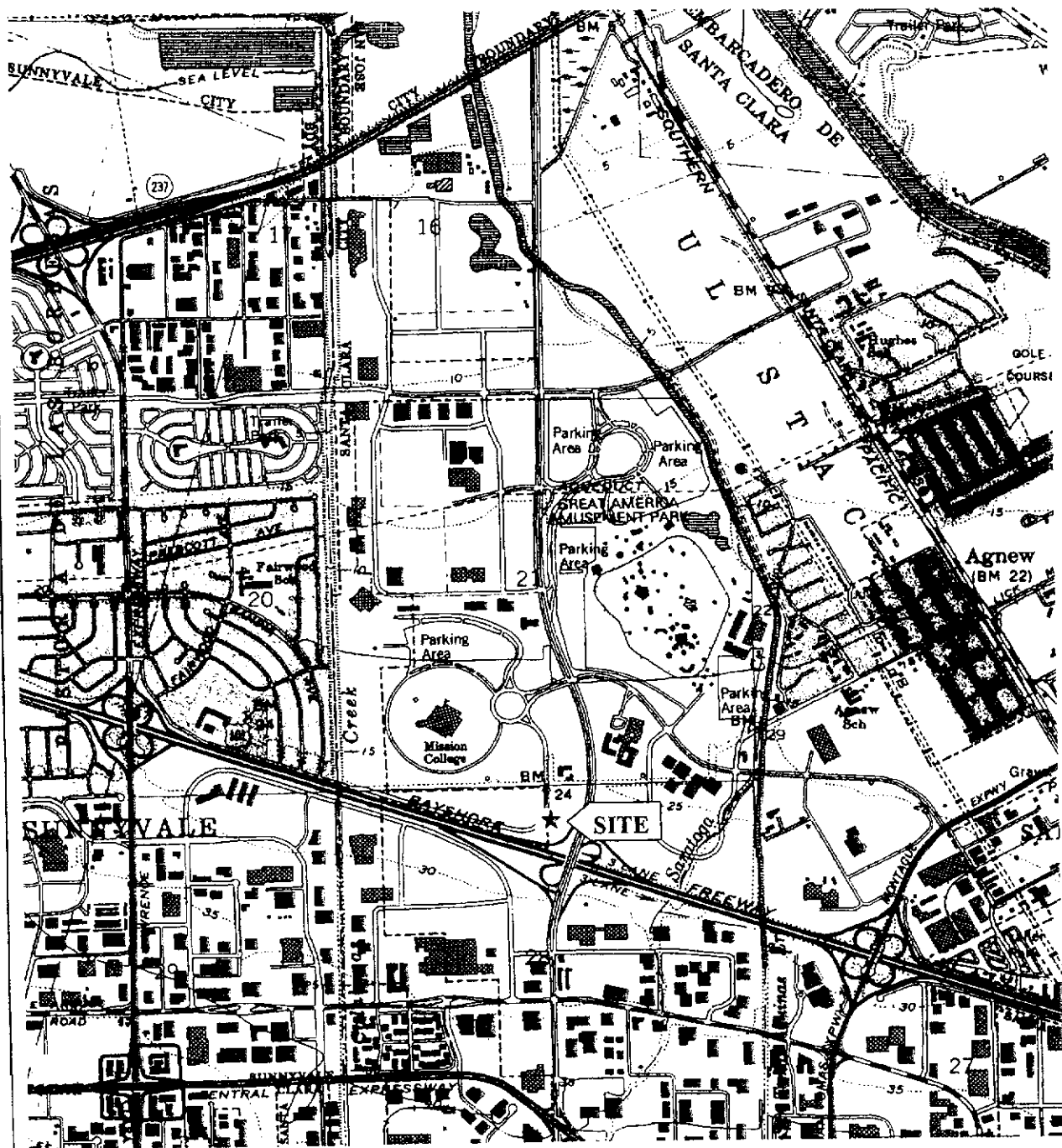
California Building Code, 2007.

CALTRANS Standard Specifications, Latest Edition.

Cleary Consultants, Inc., February 28, 1989, Soil and Foundation Investigation, Planned Administration and Rectory Building, Our Lady of Peace Parish, Santa Clara, California.

Cleary Consultants, Inc., May 14, 1997, Geotechnical Investigation, Proposed Multi-Purpose/Gymnasium Building, Our Lady of Peace Parish, Santa Clara, California.

U.S. Geological Survey, Milpitas 7.5' Quadrangle.



BASE: U.S. Geological Survey, Milpitas 7.5' Quadrangle, Santa Clara, California

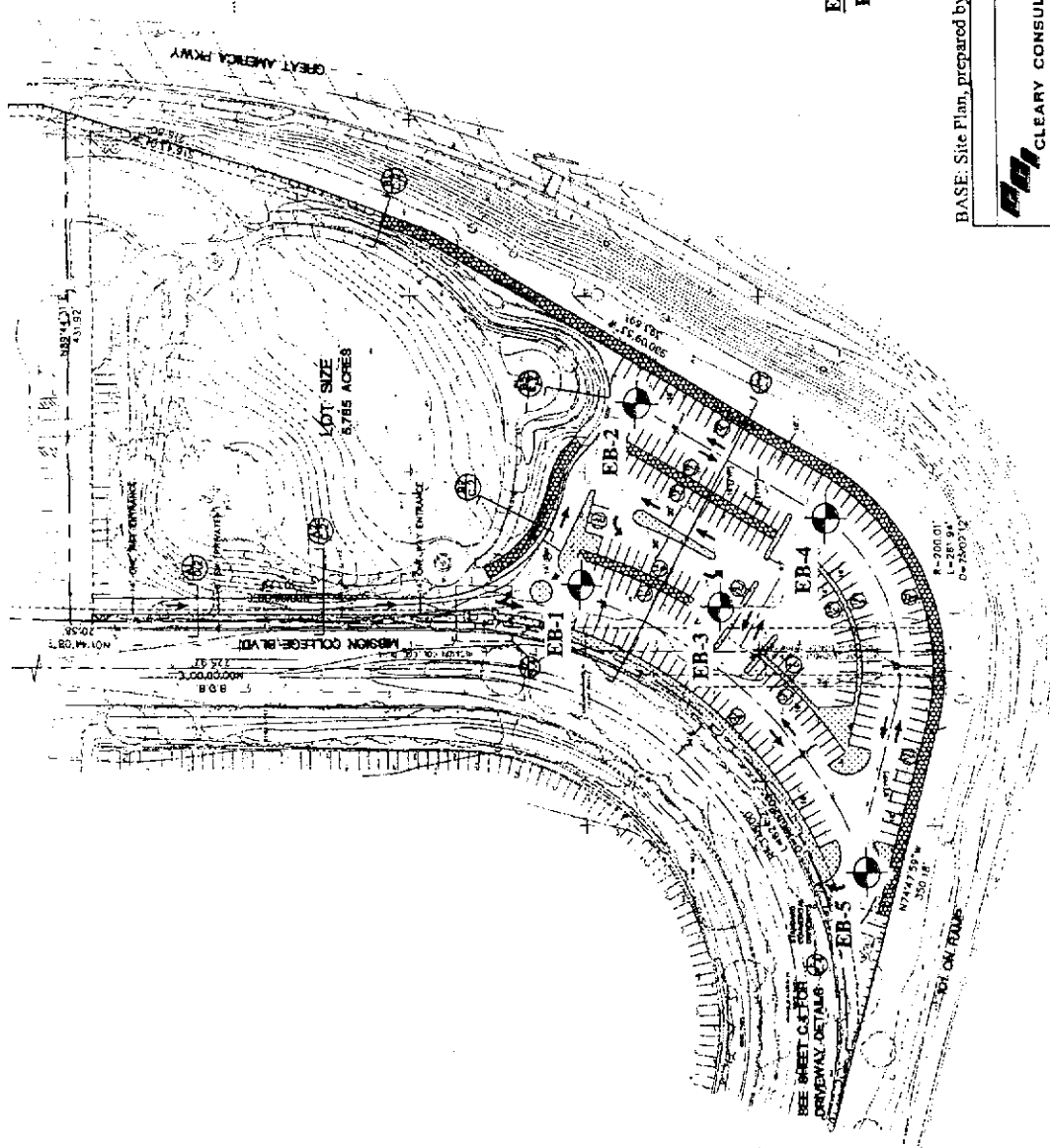
#### SITE VICINITY MAP



**CLEARY CONSULTANTS, INC.**  
Geotechnical Engineers and Geologists

**NEW PARKING LOT**  
Our Lady Of Peace Church  
Santa Clara, California


APPROVED BY	SCALE	PROJECT NO.	DATE	DRAWING NO.
GF	1" = 2000'	574.3	March 2008	1



**EXPLANATION**

EB-1 Approximate Location of Exploratory Boring

BASE: Site Plan, prepared by Ruth and Going, Inc. January 28, 2008

SITE PLAN			
 <b>CLEARY CONSULTANTS, INC.</b> <i>Geotechnical Engineers and Geologists</i>	NEW PARKING LOT		
	Our Lady Of Peace Church Santa Clara, California		
APPROVED BY	SCALE	PROJECT NO.	DRAWING NO.
GJF	1" = 100' ±	574.3	2
		DATE	
		March 2008	

PRIMARY DIVISIONS			GROUP SYMBOL	SECONDARY DIVISION
COARSE GRAINED SOILS MORE THAN HALF OF MATERIAL IS LARGER THAN NO. 200 SIEVE SIZE	GRAVELS  MORE THAN HALF OF COARSE FRACTION IS LARGER THAN NO. 4 SIEVE	CLEAN GRAVELS (LESS THAN 5% FINES)	GW	Well graded gravels, gravel-sand mixtures, little or no fines
		GRAVEL WITH FINES	GP	Poorly graded gravels or gravel-sand mixtures, little or no fines
			GM	Silty gravels, gravel-sand-silt mixtures, non-plastic fines
			GC	Clayey gravels, gravel-sand-clay mixtures, plastic fines
	SANDS  MORE THAN HALF OF COARSE FRACTION IS SMALLER THAN NO. 4 SIEVE	CLEAN SANDS (LESS THAN 5% FINES)	SW	Well graded sands, gravelly sands, little or no fines
		SANDS WITH FINES	SP	Poorly graded sands or gravelly sands, little or no fines
			SM	Silty sands, sand-silt mixtures, non-plastic fines
			SC	Clayey sands, sand-clay mixtures, plastic fines
FINE GRAINED SOILS MORE THAN HALF OF MATERIAL IS SMALLER THAN NO. 200 SIEVE SIZE	SILTS AND CLAYS  LIQUID LIMIT IS LESS THAN 50%		ML	Inorganic silts and very fine sands, rock flour, silty or clayey fine sands or clayey silts with slight plasticity
			CL	Inorganic clays of low to medium plasticity, gravelly clays, sandy clays, silty clays, lean clays
			OL	Organic silts and organic silty clays of low plasticity
	SILTS AND CLAYS  LIQUID LIMIT IS GREATER THAN 50%		MH	Inorganic silts, micaceous or diatomaceous fine sandy or silty soils, elastic silts
			CH	Inorganic clays of high plasticity, fat clays
			OH	Organic clays of medium to high plasticity, organic silts
HIGHLY ORGANIC SOILS			Pt	Peat and other highly organic soils

### UNIFIED SOIL CLASSIFICATION SYSTEM (ASTM D-2487)

U.S. STANDARD SERIES SIEVE				CLEAR SQUARE SIEVE OPENINGS		
200	40	10	4	3/4"	3"	12"
SILTS AND CLAYS		SAND			GRAVEL	COBBLES
		FINE	MEDIUM	COARSE		
				FINE	COARSE	BOULDERS

### GRAIN SIZES

SANDS AND GRAVELS	BLOWS/FOOT †
VERY LOOSE	0 - 4
LOOSE	4 - 10
MEDIUM DENSE	10 - 30
DENSE	30 - 50
VERY DENSE	OVER 50


SILTS AND CLAYS	STRENGTH ☆	BLOWS/FOOT †
VERY SOFT	0 - 1/4	0 - 2
SOFT	1/4 - 1/2	2 - 4
FIRM	1/2 - 1	4 - 8
STIFF	1 - 2	8 - 16
VERY STIFF	2 - 4	16 - 32
HARD	OVER 4	OVER 32

### RELATIVE DENSITY

### CONSISTENCY

† Number of blows of 140 pound hammer falling 30 inches to drive a 2 inch O.D. (1-3/8 inch I.D.) split barrel (ASTM D-1586).

☆ Unconfined compressive strength in tons/sq.ft. as determined by laboratory testing or approximated by the standard penetration test (ASTM D-1586), pocket penetrometer, torvane, or visual observation.

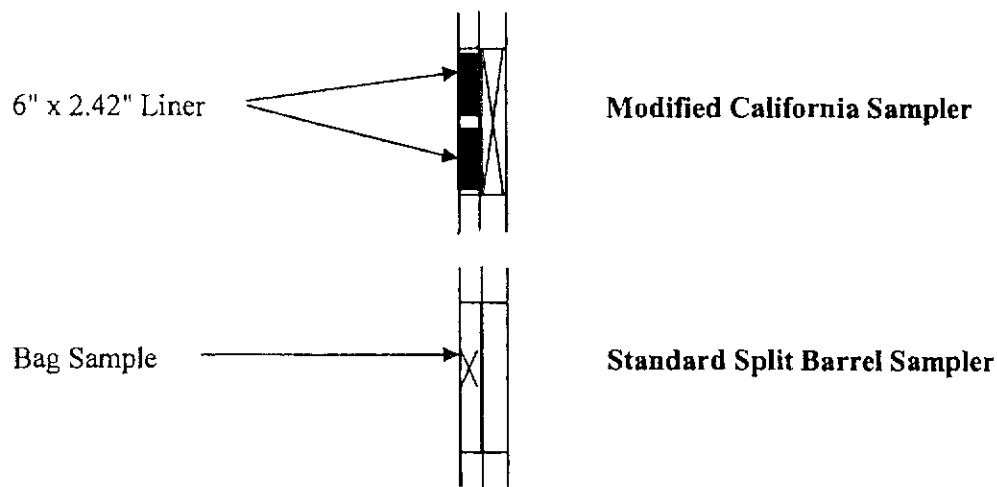
 <b>CLEARY CONSULTANTS, INC.</b> <i>Geotechnical Engineers and Geologists</i>	<b>KEY TO EXPLORATORY BORING LOGS</b>		
	NEW PARKING LOT Our Lady Of Peace Church Santa Clara, California		
	PROJECT NO.	DATE	DRAWING NO.
	574.3	March 2008	3

## FIELD SAMPLING PROCEDURES

The soils encountered in the borings were continuously logged in the field by our representative and described in accordance with the Unified Soil Classification System (ASTM D-2487).

Representative soil samples were obtained from the borings at selected depths appropriate to the soil investigation. All samples were returned to our laboratory for classification and testing.

In accordance with the ASTM D1586 procedure, the standard penetration resistance was obtained by dropping a 140 pound hammer through a 30-inch free fall. The 2-inch O.D. Standard split barrel sampler was driven 18 inches or to practical refusal and the number of blows were recorded for each 6-inch penetration interval. The blows per foot recorded on the boring logs represent the accumulated number of blows, or N-value, required to drive the penetration sampler the final 12 inches. In addition, 3.0 inch O.D. x 2.42 inch I.D. drive samples were obtained using a Modified California Sampler and 140 pound hammer. Blow counts for the Modified California Sampler were converted to standard penetration resistance by multiplying by 0.6. The sample type is shown on the boring logs in accordance with the designation below.



Where obtained, the shear strength of the soil samples using either Torvane (TV) or Pocket Penetrometer (PP) devices is shown on the boring logs in the far right hand column.

### SUMMARY OF FIELD SAMPLING PROCEDURES

NEW PARKING LOT  
Our Lady Of Peace Church  
Santa Clara, California

PROJECT NO.

574.3

DATE

March 2008

DRAWING NO.

4



## **LABORATORY TESTING PROCEDURES**

The laboratory testing program was directed toward a quantitative and qualitative evaluation of the physical and mechanical properties of the soils underlying the site.

The natural water content was determined on 35 samples of the materials recovered from the borings in accordance with the ASTM D2216 Test Procedure. These water contents are recorded on the boring logs at the appropriate sample depths.

Dry density determinations were performed on 21 samples to measure the unit weight of the subsurface soils in accordance with the ASTM D2937 Test Procedure. The results of these tests are recorded on the boring logs at the appropriate sample depths.


Atterberg Limit determinations were performed on three samples of the subsurface soils in accordance with the ASTM D4318 Test Procedure to determine the range of water contents over which the materials exhibited plasticity. The Atterberg Limits are used to classify the soils in accordance with the Unified Soil Classification System and to evaluate the soil's expansion potential. The results of these tests are presented on Drawing 11 and on the boring logs at the appropriate sample depths.


The percent soil fraction passing the No. 200 sieves was determined on 11 samples respectively, of the subsurface soils in accordance with the ASTM D1140 Test Procedure to aid in the classification of the soils.


Free swell tests were performed on six samples of the soil materials to evaluate the swelling potential of the material. The tests were performed by pouring ten grams of the dry material into a 100 mL graduated cylinder containing about 40 mL of distilled water. The mixture was stirred repeatedly and allowed to equilibrate for 24 hours, then distilled water was added up to the 100 mL mark. The graduated cylinder was then filled with distilled water to the 100 mL mark and allowed to settle until equilibrium was stoppered and left undisturbed to equilibrate. The free-swell volume was then noted. The percent free swell was calculated by dividing the free-swell volume by ten and multiplying by 100 percent. The results of these tests are presented on the boring logs.


Two R-Value tests were performed by Cooper Testing Laboratory on representative samples of the subgrade soil treated with five percent Quicklime Plus and five percent Hi-Cal Quicklime to provide data for the pavement design. The tests were performed in accordance with California Test Method 301-F and indicated an R-Value of 59 and 78, respectively, at an exudation pressure of 300 pounds per square inch. The results of the tests are presented on Drawing 12.


**DRAWING NO. 5**

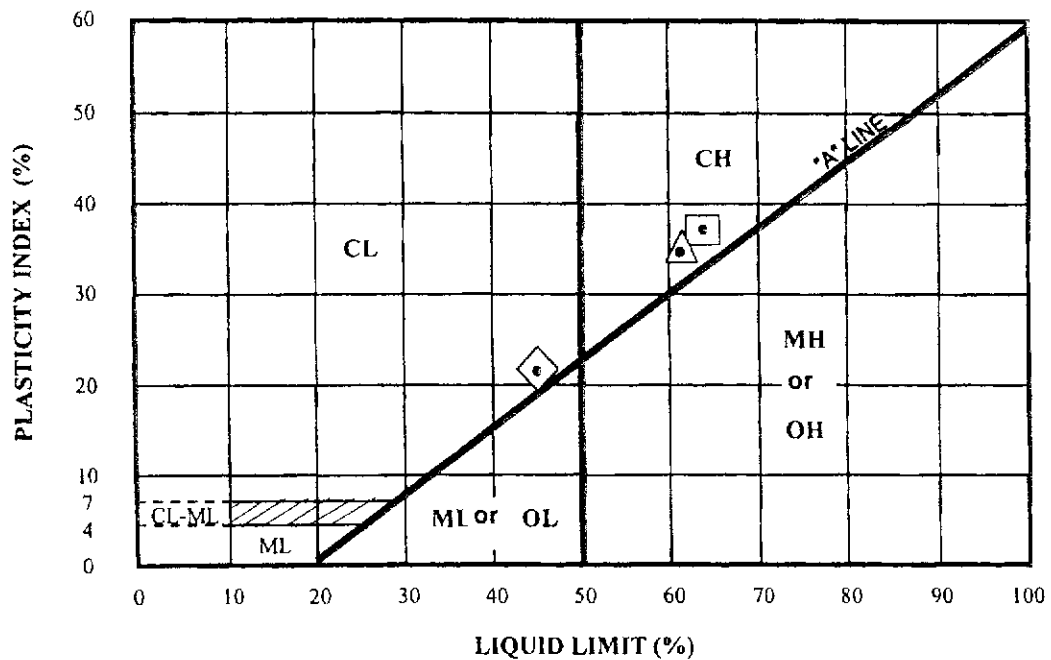
EQUIPMENT 4" Diameter Continuous Flight Auger*		ELEVATION ---		LOGGED BY MR					
DEPTH TO GROUNDWATER Not Enc.		DEPTH TO BEDROCK Not Enc.		DATE DRILLED 2/8/2008					
DESCRIPTION AND CLASSIFICATION				DEPTH (feet)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	WATER CONTENT (%)	DRY DENSITY (PCF)	SHEAR STRENGTH (KSF)
SILTY CLAY, moist, fine grained sand, occasional fine subangular to subrounded gravel, some rootlets @1.0': Liquid Limit = 61% Plasticity Index = 35% Finer than #200 = 79% Free Swell = 100% @2.5': decreased gravel content @4.0': some mottling	Grayish Brown	Stiff	CH	1	X	11	27	84	PP=4.0
				2					
				3	X	10	25		
				4	X	17	18	110	
SANDY CLAY, moist, fine to medium grained sand, occasional angular to subrounded gravel	Yellowish Brown	Stiff	CL	5					
				6	X	12	16		
Bottom of Boring = 6.0'				7					
				8					
				9					
				10					
				11					
				12					
				13					
				14					
				15					
				16					
				17					
				18					
				19					
				20					
* Drilled with a CME-55 Truck Mounted Rig PP = Pocket Penetrometer									
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL									
 <b>CLEARY CONSULTANTS, INC.</b> Geotechnical Engineers and Geologists				LOG OF EXPLORATORY BORING NO. 1					
				NEW PARKING LOT Our Lady of Peace Church Santa Clara, California					
APPROVED BY		SCALE		PROJECT NO.		DATE		DRAWING NO.	
GF		----		574.3		March 2008		6	

EQUIPMENT 4" Diameter Continuous Flight Auger*		ELEVATION ---		LOGGED BY MR				
DEPTH TO GROUNDWATER Not Enc.		DEPTH TO BEDROCK Not Enc.		DATE DRILLED 2/8/2008				
DESCRIPTION AND CLASSIFICATION				DEPTH	PENETRATION	WATER	DRY DENSITY	SHEAR
DESCRIPTION AND REMARKS	COLOR	CONSIST.	SOIL TYPE	(feet)	RESISTANCE (BLOWS/FT)	CONTENT (%)	(PCF)	STRENGTH (KSF)
SILTY CLAY, moist to very moist, occasional fine subangular to subrounded gravel, minor rootlets @1.0': Finer than #200 = 82% Free Swell = 85%	Dark Grayish Brown	Stiff	CH	1	9	24	89	PP=4.0
				2				
				3	10	23		
SANDY CLAY, moist, fine grained sand, occasional fine subangular to subrounded gravel @4.0': Finer than #200 = 53%	Dark Yellowish Brown	Stiff	CL	4	14	19	81	PP=4.0
				5		16	115	
	Yellowish Brown			6	8	16		
				7				
				8				
				9		24	102	PP=3.0
				10	12	24	98	
Bottom of Boring = 10.0'				11				
				12				
				13				
				14				
				15				
				16				
				17				
				18				
				19				
				20				
* Drilled with a CME-55 Truck Mounted Rig PP = Pocket Penetrometer								
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL								
 <b>CLEARY CONSULTANTS, INC.</b> Geotechnical Engineers and Geologists				LOG OF EXPLORATORY BORING NO. 2				
				NEW PARKING LOT Our Lady of Peace Church Santa Clara, California				
APPROVED BY	SCALE	PROJECT NO.	DATE	DRAWING NO.				
GF	----	574.3	March 2008	7				

EQUIPMENT 4" Diameter Continuous Flight Auger*		ELEVATION ---		LOGGED BY MR					
DEPTH TO GROUNDWATER Not Enc.		DEPTH TO BEDROCK Not Enc.		DATE DRILLED 2/8/2008					
DESCRIPTION AND CLASSIFICATION				DEPTH (feet)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	WATER CONTENT (%)	DRY DENSITY (PCF)	SHEAR STRENGTH (KSF)
DESCRIPTION AND REMARKS	COLOR	CONSIST.	SOIL TYPE						
3" Grass SANDY CLAY, very moist, fine grained sand, occasional fine subangular to subrounded gravel @1.0': Liquid Limit = 64% Plasticity Index = 37% Finer than #200 = 86% Free Swell = 90% @3.5': increased sand and gravel content	Brown	Stiff	CH	1		10	28 26	81 83	PP=4.0
				2		10	27		
				3					
				4		15	15 15	115 113	
CLAYEY SAND, moist, fine grained sand, occasional fine subangular to subrounded gravel @4.0': Finer than #200 = 47%	Yellowish Brown	Medium Dense	SC	5		16	15		
Bottom of Boring = 6.0'				6					
				7					
				8					
				9					
				10					
				11					
				12					
				13					
				14					
				15					
				16					
				17					
				18					
				19					
				20					
* Drilled with a CME-55 Truck Mounted Rig PP = Pocket Penetrometer									
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL									
 <b>CLEARY CONSULTANTS, INC.</b> Geotechnical Engineers and Geologists				LOG OF EXPLORATORY BORING NO. 3					
				NEW PARKING LOT Our Lady of Peace Church Santa Clara, California					
APPROVED BY		SCALE		PROJECT NO.		DATE		DRAWING NO.	
GF		---		574.3		March 2008		8	

EQUIPMENT 4" Diameter Continuous Flight Auger*		ELEVATION ---		LOGGED BY MR					
DEPTH TO GROUNDWATER Not Enc.		DEPTH TO BEDROCK Not Enc.		DATE DRILLED 2/8/2008					
DESCRIPTION AND CLASSIFICATION				DEPTH (feet)	SAMPLER	PENETRATION RESISTANCE (BLOWS/FT)	WATER CONTENT (%)	DRY DENSITY (PCF)	SHEAR STRENGTH (KSE)
DESCRIPTION AND REMARKS	COLOR	CONSIST.	SOIL TYPE						
1" Dried Vegetation SILTY CLAY, moist, occasional fine subangular to subrounded gravel @1.0': Finer than #200 = 88% Free Swell = 90% @2.5': some clay infilling	Brown	Stiff	CH	1		10	25	83	PP=3.5
				2		11	24		
				3					
SANDY CLAY, moist, fine grained sand, occasional fine subangular to subrounded gravel	Yellowish Brown	Stiff	CL	4		15	16	111	
				5		16	16	114	
				6		8	17		
Bottom of Boring = 6.0'				7					
				8					
				9					
				10					
				11					
				12					
				13					
				14					
				15					
				16					
				17					
				18					
				19					
				20					
* Drilled with a CME-55 Truck Mounted Rig PP = Pocket Penetrometer									
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL									
 <b>CLEARY CONSULTANTS, INC.</b> Geotechnical Engineers and Geologists					LOG OF EXPLORATORY BORING NO. 4				
					NEW PARKING LOT Our Lady of Peace Church Santa Clara, California				
APPROVED BY	SCALE	PROJECT NO.	DATE	DRAWING NO.					
GF	----	574.3	March 2008	9					

EQUIPMENT 4" Diameter Continuous Flight Auger*		ELEVATION ---		LOGGED BY MR				
DEPTH TO GROUNDWATER Not Enc.		DEPTH TO BEDROCK Not Enc.		DATE DRILLED 2/8/2008				
DESCRIPTION AND CLASSIFICATION				DEPTH	PENETRATION	WATER	DRY DENSITY	SHEAR
DESCRIPTION AND REMARKS	COLOR	CONSIST.	SOIL TYPE	(feet)	RESISTANCE (BLOWS/FT)	CONTENT (%)	(PCF)	STRENGTH (KSF)
SANDY CLAY, moist to very moist, fine grained sand, occasional fine subangular to subrounded gravel @0.5': Liquid Limit = 45% Plasticity Index = 21% Finer than #4 = 88% Finer than #200 = 62% Free Swell = 70%	Yellowish Brown	Stiff	CL	1	8	23	90	PP=3.5
		Stiff	CH	2	8	29	89	
SILTY CLAY, moist, occasional fine subangular to subrounded gravel	Grayish Brown			3		28		
SANDY CLAY, moist, fine grained sand, occasional fine subangular to subrounded gravel @4.0': Finer than #200 = 82%	Mottled Light Grayish Brown	Stiff	CL	4	10	29	90	
				5		23	101	
				6	13	20		
		Very Stiff		7				
				8				
@9.0': some iron staining, grading coarser				9				
SILTY SAND, moist, fine to coarse grained sand, some iron staining @9.5': Finer than #200 = 23%	Yellowish Brown	Medium Dense	SM	9	22	21	106	
				10		19	107	
Bottom of Boring = 10.0'				11				
				12				
				13				
				14				
				15				
				16				
				17				
				18				
				19				
				20				
* Drilled with a CME-55 Truck Mounted Rig PP = Pocket Penetrometer								
THE STRATIFICATION LINES REPRESENT THE APPROXIMATE BOUNDARY BETWEEN SOIL TYPES AND THE TRANSITION MAY BE GRADUAL								
 <b>CLEARY CONSULTANTS, INC.</b> Geotechnical Engineers and Geologists				LOG OF EXPLORATORY BORING NO. 5				
				NEW PARKING LOT Our Lady of Peace Church Santa Clara, California				
APPROVED BY	SCALE	PROJECT NO.	DATE	DRAWING NO.				
GF	---	574.3	March 2008	10				



KEY SYMBOL	BORING NO.	SAMPLE DEPTH (feet)	NATURAL WATER CONTENT %	LIQUID LIMIT %	PLASTICITY INDEX %	PASSING NO. 200 SIEVE %	LIQUIDITY INDEX	UNIFIED SOIL CLASSIFICATION SYMBOL
△	1	1.0	27	61	35	79	0.0	CH
■	3	1.0	26	64	37	86	0.0	CH
◆	5	0.5	23	45	21	62	0.0	CL



**CLEARY CONSULTANTS, INC.**  
Geotechnical Engineers and Geologists

### PLASTICITY CHART

NEW PARKING LOT  
Our Lady Of Peace Church  
Santa Clara, California

PROJECT NO.

574.3

DATE

March 2008

DRAWING NO.

11

# **RESULTS OF "R" VALUE TEST (CAL 301)**

Sample No	Description of Material	Water Content%	Dry Density (pcf)	Exudation Pressure (psi)	"R" Value	Expansion Pressure (psf)
Bulk Sample	Grayish Brown SANDY CLAY	81.1	68.1	371	68	0.0
EB-1 (0.0 - 5.0')	(5% Quick Lime Plus)	85.6	62.8	120	31	0.0
		83.4	65.3	260	53	0.0

R-Value at 300 psi exudation pressure = 59

Expansion Pressure at 300 psi exudation pressure = 0 psf

Sample No	Description of Material	Water Content%	Dry Density (pcf)	Exudation Pressure (psi)	"R" Value	Expansion Pressure (psf)
Bulk Sample	Grayish Brown SANDY CLAY	21.9	99.7	487	75	0.0
EB-1 (0.0 - 5.0')	(5% Dolomitic Quick Lime)	25.0	95.7	233	46	0.0
		22.4	97.7	323	72	0.0

R-Value at 300 psi exudation pressure = 69


Expansion Pressure at 300 psi exudation pressure = 0 psf

Sample No	Description of Material	Water Content%	Dry Density (pcf)	Exudation Pressure (psi)	"R" Value	Expansion Pressure (psf)
Bulk Sample	Grayish Brown SANDY CLAY	26.1	92.5	191	45	0.0
EB-1 (0.0 - 5.0')	(5% High-CAL Quick Lime)	21.5	100.3	607	86	0.0
		23.0	97.4	303	78	0.0

R-Value at 300 psi exudation pressure = 78

Expansion Pressure at 300 psi exudation pressure = 0 psf

## **R-VALUE TEST RESULTS**

 <b>CLEARY CONSULTANTS, INC.</b> <i>Geotechnical Engineers and Geologists</i>		<b>NEW PARKING LOT</b> Our Lady Of Peace Church Santa Clara, California		
<b>APPROVED BY</b>	<b>SCALE</b>	<b>PROJECT NO.</b>	<b>DATE</b>	<b>DRAWING NO.</b>
GF	---	574.3	March 2008	12



MITIGATION MONITORING AND  
REPORTING PROGRAM

**Our Lady of Peace Church and Shrine  
Parking Lot Site Paving Project**

File Numbers: PLN2008-06863

**City of Santa Clara**

October 6, 2008

# P R E F A C E

Section 21081.6 of the California Environmental Quality Act (CEQA) requires a Lead Agency to adopt a Mitigation Monitoring and Reporting Program whenever it approves a project for which measures have been required to mitigate or avoid significant effects on the environment. The purpose of the monitoring and reporting program is to ensure compliance with the mitigation measures during project implementation.

On March 14, 2008, 2008, the Mitigated Negative Declaration was adopted for the Our Lady of Peace Church and Shrine Parking Lot Site Paving project. The Initial Study/Mitigated Negative Declaration concluded that the implementation of the project could result in significant effects on the environment; therefore, mitigation measures were incorporated into the proposed project or are required as a condition of project approval. This Mitigation Monitoring and Reporting Program outlines these measures and how, when, and by whom they will be implemented.

**Mitigation Monitoring and Reporting Program**  
**Santa Clara SC-1 Data Center**

Impact	Mitigation or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
Air Quality				
<b>Impact AIR-1:</b> Construction-generated dust, if uncontrolled, could result in a significant air quality impact.	<b>MM-AIR-2.1:</b> The BAAQMD has prepared a list of feasible construction dust control measures that can reduce construction impacts to a less than significant level. The following construction practices will be implemented during construction on all sites within the project area:  <ul style="list-style-type: none"><li>- Water all active construction areas at least twice daily</li><li>- Cover all trucks hauling soil, sand, and other loose materials or require all trucks to maintain at least two feet of freeboard.</li><li>- Pave, apply water three times daily, or apply (non-toxic) soil stabilizers on all unpaved access roads, parking areas, and staging areas at construction sites.</li><li>- Sweep streets daily (preferably with water sweepers) all paved access roads, parking areas, and staging areas at construction sites.</li><li>- Sweep streets daily (preferably with water sweepers) if visible soil material is carried onto adjacent public streets.</li><li>- Hydroseed or apply non-toxic soil stabilizers to inactive construction areas.</li><li>- Enclose, cover, water twice daily, or apply non-toxic soil binders to exposed stockpiles (dirt, sand, etc.).</li><li>- Install sandbags or other erosion control measures to prevent silt runoff to public roadways.</li><li>- Replant vegetation in disturbed areas as quickly as</li></ul>	During construction; project sponsor and contractors.	All measures shall be printed on all construction documents, contracts, and project plans and implemented during construction.	Director of Planning and Inspection
<b>Less Than Significant Impact with Mitigation</b>				

**Mitigation Monitoring and Reporting Program**  
**Santa Clara SC-1 Data Center**

Impact	Mitigation or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
<i>Biological Resources</i>				
<p>Development of the proposed project could result in impacts to individual burrowing owls if owls moved onto the site prior to project construction. If owls are using active nests when construction activity commences, grading of the site could result in destruction of nests and individual owls.</p> <p><b>Less Than Significant Impact with Mitigation</b></p>	<p><u>Pre-construction Surveys.</u> Pre-construction surveys for burrowing owls should be conducted in potential habitat in conformance with CDFG protocols, no more than 30 days prior to the start of construction. If no Burrowing Owls are located during these surveys, no additional action would be warranted. However, if Burrowing Owls are located on or immediately adjacent to (i.e., within 250 ft of) the site the following mitigation measures will be implemented.</p> <p><u>Buffer Zones.</u> If Burrowing Owls are present during the nonbreeding season (generally 1 September to 31 January), a 150-foot (ft) buffer zone should be maintained around the occupied burrow(s) if practicable. If such a buffer is not practicable, a reduced buffer is acceptable during the nonbreeding season as long as the burrow will not be directly impacted (in which case Measure 1c should be implemented). During the breeding season (generally 1 February to 31 August), a 250-ft buffer, within which no new activity will be permissible, will be maintained between project activities and occupied burrows. Owls present on site after 1 February will be assumed to be nesting on or adjacent to the site unless evidence indicates otherwise. This protected area will remain in effect until 31 August, or based upon monitoring evidence, until young owls are foraging independently or the nest is no longer active.</p>	<p>To be implemented prior to, and possibly during construction, by the project sponsor and contractors.</p> <p>All measures shall be printed on all construction documents, contracts, and project plans and implemented prior to and during construction.</p>	<p>Director of Planning and Inspection</p>	

**Mitigation Monitoring and Reporting Program**  
**Santa Clara SC-1 Data Center**

Impact	Mitigation or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
	<u>Passive Relocation.</u> If construction will directly impact occupied burrows, eviction of owls should occur outside the nesting season to prevent injury or mortality of individual owls. No burrowing owls will be evicted from burrows during the nesting season (1 February through 31 August) unless evidence indicates that nesting is not actively occurring (e.g., because the owls have not yet begun nesting early in the season, or because young have already fledged late in the season). Relocation of owls during the nonbreeding season will be performed by a qualified biologist using one-way doors, which should be installed in all burrows within the impact area and left in place for at least two nights. These one-way doors will then be removed and the burrows backfilled immediately prior to the initiation of grading.			
<i>Cultural Resources</i>				
<b>Impact CR-1:</b> Buried cultural materials could be encountered during project construction.	As required by County ordinance, this project has incorporated the following guidelines: - Pursuant to Section 7050.5 of the Health and Safety Code, and Section 5097.94 of the Public Resources Code of the State of California in the event of the discovery of human remains during construction, there shall be no further excavation or disturbance of the site or any nearby area reasonably suspected to overlie adjacent remains. The Santa Clara County Coroner shall be notified and shall make a determination as to whether the remains are Native American. If the Coroner determines that the remains are not subject to his authority, he shall notify the Native American Heritage Commission who shall attempt to identify	To be implemented during construction by the project sponsor and contractors.	All measures shall be printed on all construction documents, contracts, and project plans and implemented prior to and during	Director of Planning and Inspection
<b>Less Than Significant Impact with Mitigation</b>				

**Mitigation Monitoring and Reporting Program**  
**Santa Clara SC-1 Data Center**

<b>Impact</b>	<b>Mitigation or Avoidance Measure(s)</b>	<b>Timeframe and Responsibility for Implementation</b>	<b>Method of Compliance</b>	<b>Oversight of Implementation</b>
	descendants of the deceased Native American. If no satisfactory agreement can be reached as to the disposition of the remains pursuant to this State law, then the land owner shall re-inter the human remains and items associated with Native American burials on the property in a location not subject to further subsurface disturbance.		construction.	
<b>Hydrology and Water Quality</b>				
Construction activities could temporarily increase pollutant loads in stormwater runoff.	<b>MM HYDRO-1.1:</b> Prior to construction of the project, the City shall require the applicant to submit a Storm Water Pollution Prevention Plan (SWPPP) and a Notice of Intent (NOI) to the State of California Water Resource Quality Control Board to control the discharge of storm water pollutants including sediments associated with construction activities. Along with these documents, the applicant may also be required to prepare an Erosion Control Plan. The Erosion Control Plan may include Best Management Practices (BMPs) as specified in the California Storm Water Best Management Practice Handbook (such as silt fences/straw waddles around the perimeter of the site, regular street cleaning, and inlet protection) for reducing impacts on the City's storm drainage system from construction activities. The SWPPP shall include control measures during the construction period for: <ul style="list-style-type: none"> <li>• Soil stabilization practices,</li> <li>• Sediment control practices,</li> <li>• Sediment tracking control practices,</li> <li>• Wind erosion control practices, and</li> </ul>	To be implemented during and after construction by the project sponsor and contractors.	All measures shall be printed on all construction documents, contracts, and project plans and implemented prior to and during construction and post construction periods.	Director of Planning and Inspection and Director of Public Works
<b>Less Than Significant Impact with Mitigation</b>				

**Mitigation Monitoring and Reporting Program**  
**Santa Clara SC-1 Data Center**

Impact	Mitigation or Avoidance Measure(s)	Timeframe and Responsibility for Implementation	Method of Compliance	Oversight of Implementation
	<ul style="list-style-type: none"> <li>• Non-storm water management and waste management and disposal control practices.</li> </ul> <p><b>MM HYDRO-1.2:</b> Prior to issuance of a grading permit, the applicant shall be required to submit copies of the NOI and Erosion Control Plan (if required) to the Department of Public Works. The applicant shall also be required to maintain a copy of the most current SWPPP on-site and provide a copy to any City representative or inspector on demand.</p> <p><b>MM HYDRO-1.3:</b> The development shall comply with City of Santa Clara ordinances, including erosion- and dust-control during site preparation and grading, and maintaining adjacent streets free of dirt and mud during construction.</p> <p><b>MM HYDRO-1.4:</b> The proposed development shall comply with the NPDES permit issued to the City of Santa Clara.</p>			

Source: City of Santa Clara. Initial Study and Mitigated Negative Declaration. Our Lady of Peace Church and Shrine Parking Lot Site Paving Project. July 2008

CITY OF SANTA CLARA

AGENDA MATERIAL ROUTE SHEET

SUBJECT: Resolution to Rezone + Amendment of <sup>to allow</sup> Conditions Use Council Date: 10/14/08

Permit to Construct 215 space Parking Lot on Undeveloped Parcel  
at 2800 Mission College Blvd., Our Lady of Peace Church

CERTIFICATION

The proposed Resolution  
Regarding the above rezoning request  
has been reviewed and is hereby certified.

PUBLICATION REQUIRED:

The attached Notice/Resolution/Ordinance is to be published \_\_\_\_\_ time(s) at least \_\_\_\_\_ days before the scheduled meeting/public hearing/bid opening/etc., which is scheduled for \_\_\_\_\_, 200\_\_.

AUTHORITY SOURCE FOR PUBLICATION REQUIREMENT:

Federal Codes:

Title \_\_\_\_\_ U.S.C. § \_\_\_\_\_  
(Titles run 1 through 50)

California Codes:

Code \_\_\_\_\_ § \_\_\_\_\_  
(i.e., Government, Street and Highway, Public Resources)

Federal Regulations:

Title \_\_\_\_\_ C.F.R. § \_\_\_\_\_  
(Titles run 1 through 50)

California Regulations:

Title \_\_\_\_\_ California Code of Regulations § \_\_\_\_\_  
(Titles run 1 through 28)

City  
City Charter § \_\_\_\_\_ (i.e., 1310. Public Works Contracts. Notice published at least once at least ten days before bid opening)  
City Code § \_\_\_\_\_

1. As to City Functions, by

Kevin L. Riley  
Department Head

2. As to Legality, by

Heleene Hechter  
City Attorney's Office / CAO Assignment No 08.1390

3. As to Environmental  
Impact Requirements, by

Kevin L. Riley  
Director of Planning and Inspection

4. As to Substance, by

J. Aparicio  
City Manager

Revision Date June 7, 2005